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The Effectiveness of a Personalized School-wide Crisis and Trauma Management Training Program on Sense of Preparedness for School Counselors-in-training

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THE EFFECTIVENESS OF A PERSONALIZED SCHOOL-WIDE CRISIS AND
TRAUMA MANAGEMENT TRAINING PROGRAM
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SCHOOL COUNSELORS-IN-TRAINING

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A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy in Counselor Education

By

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ABSTRACT

The purpose of the study was to investigate the effectiveness of a personalized school-wide crisis and trauma management training program for master's-level school counselors-in-training. The study began with Pilot Study 1: Crisis Training Need Assessment which sought to best identify the crisis training needs for a specific geographic region. Results from Pilot Study 1 supported that unexpected student and teacher death was the crisis category which affects students the most and is in need of further training at the master's level. Next, Pilot Study 2: Crisis Training Feedback sought to obtain comments and suggestions from masters- and doctoral-level counselors-in-training regarding a personalized school-wide management training developed for the main study. Results from Pilot Study 2 indicated that both the content and the method of delivery for the crisis training were above adequate, as reported by the participants.

The Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training was then implemented to assess the effectiveness of the intervention on school counselors-in-training sense of preparedness to intervene in an unexpected student and teacher death crisis incident. Twenty-seven ($N = 27$) CACREP and non-CACREP participants were asked to complete the School Counselor-in-Training Crisis Preparedness (SCIT-CP) inventory, a 19-item assessment, at four data collection points across a semester while enrolled in a school counseling practicum or internship course. Between data collection time points 2 and 3, the 3-hour crisis training intervention was presented to the participants. Results indicated that non-CACREP students reported a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident than did the CACREP participants at all four data

collection time points. Additionally, all students demonstrated a greater sense of preparedness to intervene following the crisis training than before receiving the crisis training.

Results from this study support the use of in-service training experiences in master's-level curriculum, particularly in courses where students are concurrently working in a school counseling field experience. Implications for this study also lend support for the continued need for training in CACREP required standards that are pertinent to professional school counseling practice, such as crisis and trauma detection and intervention

This dissertation is approved for
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DEDICATION

In the summer of 2009, I returned from my first international study abroad opportunity with vigor and motivation to pursue a dissertation topic. I pondered several directions for my dissertation topic. Cultural immersion as a component of counselor development. Quantifying the effects of expressive arts as a counselor development tool. Crisis management and training. Through every idea came a series of dialogues with my confidante, my cheerleader, my mom.

Mom, I dedicate every ounce of energy I have given to this project to you. I dedicate the vision, the development, the hours, and the final product. Thank you for loving me and encouraging me through a decade of schooling. Thank you for being my springboard for ideas. I will never think of this final hurdle without also thinking of you. I dedicate this to you Mom, lovingly, in your memory.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION

Statement of the Problem

School counselors are regularly called upon to be first responders to trauma and crisis incidents that impact school-aged children (American School Counselor Association [ASCA], 2007; Daniels et al., 2007). In fact, often "school counselors [are] in the critical position of being the only accessible mental health service provider for many students and families" (Lockhart & Keys, 1998, p. 3). With school shootings and other acts of violence, student and teacher deaths, natural disasters, and other world events affecting the American student's psychological well-being, it is important, now more than ever, that school counselors be equipped with adequate skills to intervene in crisis situations when necessary (Allen et al., 2002). As traumatic psychological effects can have short and long term impact (Carr, 2004), school counselors can play an integral role in facilitating movement through distress toward psychological equilibrium (Hebert & Ballard, 2007).

Chief among the responsibilities for the professional school counselor during and after crisis incidents is to provide immediate and direct services to students and school personnel alike (ASCA, 2007). Such services may include but are not limited to individual counseling, group counseling, facilitating support groups, and classroom interventions through guidance lessons (Hebert & Ballard, 2007; Schonfeld & Newgass, 2003). School counselors may also partner with community resources to deliver systemic support for students beyond the school scene (Fitch, Newby, Ballestero, & Marshall, 2001; Schonfeld & Newgass; Thompson, 1995). Community partners can help mediate the long-term emotional and psychological impact both during and after traumatic

incidents (Austin, 2003), therefore collaborating with such resources can offer added benefits to the trajectory of student wellness.

As school counselors are held accountable for trauma and crisis prevention, intervention, and postvention (Riley, 2000) by parents (Trump, 2007), students and staff (Hernandez & Seem, 2004; Scruggs, 1999), and the community at large (Adamson & Peacock, 2007), school counselor education programs must therefore be held accountable for preparing future school counselors to execute such responsibilities. Understanding the age-specific reactions by traumatized children is a pivotal component to detection and intervention of further issues (Burnham & Hooper, 2008; The National Child Traumatic Stress Network [NCTSN], 2004). Additionally, understanding the residual trauma which can be experienced by other students and school personnel is important in offering whole-school support and recovery through crisis (Auger, Seymour, & Roberts, 2004; Schonfeld & Newgass, 2003). With the increasing trend of critical incidents affecting students (Allen et al., 2002; Hernandez & Seem, 2004; Lockhart & Keys, 1998), a restructuring of counselor education programs may be necessary to better prepare future school counselors for crisis and trauma incidents (Allen et al., 2002; House & Sears, 2002).

Background of the Study

As societal times have changed, so has the school counseling profession (Hayes, Dagley, & Horne, 1996). Beginning in the 1960s, the three Cs of counseling, consultation, and coordination have driven the professional focus of school counseling. While these tenets still underlie school counseling practice, they "no longer provide enough breadth and depth of scope for professional school counselors to be effective"

(Erford, 2007, p. 4-5). To most adequately prepare future professional school counselors, counselor educators and practitioners now identify the following five areas of focus in school counselor education: (a) leadership, (b) advocacy, (c) teaming and collaboration, (d) counseling and coordination, and (e) assessment and use of data (Erford). Within each standard lies additional services in which school counselors are responsible for promoting and providing. For example, within counseling and coordination, the professional school counselor is responsible for brief counseling for individuals, small groups, and families. Each of the overarching five standards aids in promoting a comprehensive scope to school counselor education.

To ensure that the five focus areas are being executed, the American School Counselor Association (ASCA) has standardized expectations for the professional school counselor. The ASCA National Standards for School Counseling Programs were established in 1997 to delineate the various tasks associated with school counseling for both student services and system-wide support (Campbell & Dahir, 1997). Since 1997, the ASCA National Model has been used as an executive summary manual for specific implementation of counseling services (ASCA, 2005). Within this summary, four methods of delivering counseling services were identified and defined:

1. Guidance curriculum: Structured developmental lessons designed to assist students in achieving the competencies and is presented systematically through classroom and group activities K-12

2. Individual student planning: Coordinating ongoing systemic activities designed to assist the individual student in establishing personal goals and developing future plans

3. Responsive services: Activities that meet students', parents', and teachers' immediate need for referral, consultation, or information

4. System support: Professional development, consultation, collaboration and teaming, and program management and operation activities that establish, maintain, and enhance the total school counseling program.

Due to the diverse nature of the professional school counselor's role, counselor education programs seek to prepare future school counselors in each of these service areas (Erford, 2007), along with providing training in mental health counseling. To help accomplish this mission, as well as to prepare counselors-in-training for state licensure, the Council for Accreditation of Counseling and Related Educational Programs (CACREP) has set standards "to ensure that students develop a professional counselor identity and master the knowledge and skills to practice effectively" (2009 Standards, p. 1). For school counselor education, a minimum of 48 master's level counseling credit hours are required, eight core curriculum experiences must be met, followed by eight additional school specific domains. As state-to-state counseling licensure and certification requirements vary, it is the national standards set forth by CACREP as an accrediting body that provides an educational benchmark for counselor education programs across the country.

One issue often neglected in school counselors-in-training curricula is crisis and trauma intervention education for school settings (Adamson & Peacock, 2007). Copeland, Keeler, Angold, and Costello (2007) found in their 10-year longitudinal study that 68% of youth were exposed to at least one trauma causing event by age 16. To address this growing concern for school-aged children, in 2009 CACREP published their

latest set of standards which required that school counselors-in-training demonstrate knowledge in the "potential impact of crises, emergencies, and disasters on students, educators, and schools, and know the skills needed for crisis intervention" (2009 Standards, p. 39). While CACREP currently accredits 198 master's level school counseling programs, this number still represents less than 45% of all school counselor training programs in the nation (Directory of Accredited Programs, 2009; ASCA, 2008, Career/Roles, ¶ 7). Thus, while curricular standards for crisis training are established for school counselors, it cannot be assumed that all counselor education programs adhere to such requirements.

In 2007, an ASCA position statement further noted that "professional school counselors should be trained in a variety of crisis intervention models to help with the mitigation of stressors in students" (p. 12). While both ASCA and CACREP governing bodies have voiced the necessity for school counselor education to train future counselors to manage crisis incidents, neither has mandated enrollment in specific coursework to ensure such competencies are being met. Without adequate training in crisis and trauma, school counselors are not fully equipped for professional practice (Erford, 2007).

A national school counseling preparation survey conducted by Allen et al. (2002) supports the aforementioned concerns that school counselor education may be missing pertinent training in crisis management. Of those school counselors-in-training surveyed, only 10.6% ($n = 26$) reported having completed coursework in school crisis intervention. In 2005, another national assessment by Hoheisel (2005) indicated that only 6.1% of school counselor education programs ($n = 6$ of 98 surveyed) required school counselors-in-training to complete a separate course in crisis management. Mathai's (2002) national

survey of state certified school counselors found that 89% of those surveyed ($n = 459$) wanted additional training in crisis intervention. Each of these recent national surveys highlights the deficit in crisis and trauma training in school counselor education and the rising concern by school counselors for more preparation.

Allen et al. (2002) stated that the responsibility for school counselor crisis training lies largely in higher education as "preparation at the university level, in addition to continuing professional development, are prime areas to target for improving the crisis intervention skills of school counselors" (p. 101). As crisis and trauma related issues continue to increase, school counselor preparation must redirect curricula to adequately train professional school counselors in crisis detection, intervention, and management. The current study seeks to explore the nature of crisis preparedness education for school counselors-in-training and further assess potential solutions to this issue.

Purpose of the Study

The purpose of the study is to investigate the effectiveness of a personalized school-wide crisis and trauma management training program for master's-level school counselors-in-training. Of specific interest is the impact that such training might have on the future school counselors' sense of preparedness in crisis and trauma detection and intervention.

Research Questions

Through my research, the following research questions will be explored:

1. *Question 1:* How prepared do school counselors-in-training feel to intervene in a crisis and trauma situation prior to receiving crisis and trauma training?

2. *Question 2:* Do CACREP and non-CACREP students differ on their initial sense of preparedness?

3. *Question 3:* Are counselors-in-training sense of preparedness to intervene in an unexpected student and teacher death crisis incident impacted by receiving crisis and trauma training?

4. *Question 4:* Do CACREP and non-CACREP students differ on their sense of preparedness following crisis and trauma training?

5. *Question 5:* Do school counselors-in-training demonstrate a different sense of preparedness one month following crisis and trauma training?

6. *Question 6:* Do CACREP and non-CACREP students differ on their sense of preparedness one month following crisis and trauma training?

7. *Question 7:* How do school counselors-in-training report their master's level training concerning crisis and trauma detection and intervention?

8. *Question 8:* Do CACREP and non-CACREP students differ on how they report their master's level training concerning crisis and trauma detection and intervention?

9. *Question 9:* Do school counselors-in-training believe crisis training for master's-level school counselors-in-training is essential to appropriate counseling training?

Significance of the Study

Child and adolescent trauma research began to take shape in 1993 (Saigh, Green, & Korol, 1996), and since then, school hostage events (Daniels et al., 2007), student and teacher suicidality (Capuzzi, 2002; Thompson, 1995), school violence (Hernandez &

Seem, 2004; Riley, 2000; Trump, 2007), the Columbine High School shootings (Arman, 2000; Austin, 2003), the 9/11 terrorist attacks on the World Trade Center and the Pentagon (Auger et al., 2004), the war in Iraq (Burnham & Hooper, 2008), bioterrorism (Baggerly & Rank, 2005), and natural disasters such as hurricanes Katrina and Rita (Hebert & Ballard, 2007) are just a few of the crises and traumatic incidents that are permeating school counseling literature. The call for crisis responses in schools is continuing to increase (Allen et al., 2002) yet crisis preparedness training is often lacking or absent from master's level school counselors-in-training curricula (Adamson & Peacock, 2007; Auger et al., 2004; Hoheisel, 2005). Even with limited crisis training, professional school counselors are still regarded as the experts in school crisis management (Daniels et al., 2007). It is this divide between counselor training and counselor duties regarding crisis and trauma interventions within school settings that drives the research interest underlying the current study.

As such, consumers of the current study include but are not limited to professional school counselors, counselor educators, community agencies working with school systems, school stakeholders, parents, and students alike (Scruggs, 1999). In determining the most appropriate form of crisis and trauma training and other pertinent information surrounding this education, this study will equip counselor education programs with an alternative approach to training future professional school counselor for crisis situations which they may encounter.

Definition of Terms

1. *American School Counselors Association (ASCA)* - the foundation "that supports school counselors' efforts to help students focus on academic, personal/social, and

career development so they achieve success in school and are prepared to lead fulfilling lives as responsible members of society. [ASCA] provides professional development, publications and other resources, research, and advocacy to professional school counselors around the globe" (ASCA, 2005, p. i.)

2. *Council for Accreditation of Counseling and Related Educational Programs (CACREP)* - The accrediting body for master's degree programs in career counseling; college counseling; community counseling; gerontological counseling; marital, couple, and family counseling/therapy; mental health counseling; school counseling; student affairs; as well as doctoral degree programs in counselor education and supervision (CACREP, 2009).

3. *Crises* (in schools) - "those [incidents] made by humans and natural disasters, acts of terrorisms, death of a member of the school community, sexual assault, suicide, assault, hate crimes, armed hostage events, barricades, and homicide" (Daniels et al., 2007, p. 483); situations that are not usual, normal, or average (Capuzzi, 2002).

4. *Posttraumatic Stress Disorder* (PTSD) - "the development of characteristic symptoms following exposure to an extreme traumatic stressor involving direct personal experience of an event that involves actual or threatened death or serious injury, or other threat to one's physical integrity; or witnessing an event that involves death, injury, or a threat to the physical integrity of another person; or learning about unexpected or violent death, serious harm, or threat of death or injury experienced by a family member or other close associate" (APA, 2000, p. 463).

5. *Professional School Counselor* - "state-certified school counselor (may be credentialed or licensed depending on the state). Most school counselors have a master's degree in school counseling" (ASCA, 2005, p. 152).

6. *School violence* - "any behavior that violates a school's educational mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions, and disorder" (Center for the Prevention of School Violence, 2002).

7. *Trauma* - an emotional reaction to a recognizable stressor leading to a range of distress symptoms (Weathers & Keane, 2007). It is further noted that trauma does not solely refer to frequency or magnitude of the event but rather to the human reaction to the experience. Such reactions may vary depending on the "subjective appraisal" of the incident (p. 108).

CHAPTER TWO: REVIEW OF LITERATURE

To provide a broad scope of relevant literature, I accessed several databases in which to retrieve articles. Through *Ebsco Academic Search Premiere, ERIC, ProQuest Direct, Proquest Dissertations and Theses, Lexis Nexis Academic,* and *PsycINFO,* I used the key terms "school counseling", "school counselor", "counselor education", "natural disaster", "suicide", "crisis", and "trauma", to gather the resources necessary for a review of related literature. The following chapter will discuss the training procedures of master's-level school counselors-in-training, including the national standards set forth by ASCA and CACREP. Crisis and trauma research will then be presented as well as implications offered for how such incidents affect student reactions and development within the school setting.

The History of School Counseling

Throughout the twentieth century, the professional school counselor's role has fluctuated due to societal influences (Burnham & Jackson, 2000; Erford, 2007). Beginning in the early 1900s vocational guidance was the primary counselor task, a role which prepared students for the "economic, educational, and social problems of those times" (Gysbers, 2001, p. 96). With the presence of the Industrial Revolution and an increase of worker placement, the focus of school counseling was career orientation and preparation (Lewis & Borunda, 2006). Such responsibilities ostensibly promoted students' successful transition from school to work and were intended to encourage students to become productive American citizens.

By the early 1920s, the rise of developmental studies, the mental hygiene movement, and progressive education began transforming the school counselor role

(Gysbers, 2001). School counseling focus shifted drastically from a vocational outlook of guidance to a mental health and clinical model of guidance (Gysbers). As economic pressures plagued American citizens during the Great Depression, more mental health issues became prevalent in both school and work settings. As such, measuring intellectual and personality traits became a primary school counselor role during this time period (Lewis & Borunda, 2006).

The mental health movement of school counseling continued into the 1930s. School counselors were now primary candidates for addressing psychosocial issues through a clinical model of personal counseling in a school setting (Gysbers, 2001). Counselors were considered the expert source of information for students and were regarded as competent in gathering data related to student abilities, aptitudes, interests, and characteristics (Schmidt, 2002).

During the 1940s, a revision was yet again needed for school counselor roles. The three main influences during this time period included (a) the popularity of a client-centered approach as encouraged by the psychotherapist Carl Rogers, (b) the overarching impact of World War II on the American society, and (c) the government's involvement in counseling and educational practices (Schmidt, 2002). While mental health counseling remained a school counseling focus, vocational guidance remerged in the school scene (Gysbers, 2001). World War II necessitated school-aged students to be assessed and then recruited for military assignment oversees or placement in the American job market. To assist in such screening, the Vocational Education Act of 1946 allotted additional funds for vocational counselors in a school setting (Gysbers). Soon after, the space race of the 1950s refocused school counseling on educational achievement (Hayes et al., 1996; Herr,

2002). The goal for school counselors was preparing students to be internationally competitive in math and science, thus pre-college preparation was encouraged (Herr; Lewis & Borunda, 2006).

It was in the 1960s that a comprehensive scope for professional school counseling was first conceptualized although the actual implementation of such programs would not take place until the late 1990s (Herr, 2002). Throughout the 1970s, the school counseling profession remained broad in capacity, addressing guidance, mental health services, attendance, and other issues, yet the systematic focus was waning (Gysbers, 2001). Developmental guidance and counseling models by Myrick (1997) and Johnson and Johnson (1991) emerged in the 1980s although the model most widely accepted today by ASCA originated with Gysbers and Moore (1981) and was adapted by Gysbers and Henderson (2000).

Hayes et al. (1996) argued that reassessment and transformation in school counselor education is not only useful but is warranted. While school counselor training models date back to the beginning of the 1900s, changing societal times no longer allow such modalities to be deemed as sufficient for preparing the professional school counselor (Hayes et al.; Lewis & Borunda, 2006). As such, accrediting bodies for counselor education programs (CACREP) and national standards through professional school counseling organizations (ASCA) have helped further define the school counselors' training needs.

CACREP Standards

CACREP is the national accrediting body for master's- and doctoral-level counseling programs, including school counselor education. Foundational CACREP components include:

1. History: CACREP evolved from other professional organizations including The Association for Counselor Education and Supervision (ACES) and ASCA.

2. Vision: "To provide leadership and to promote excellence in professional preparation through the accreditation of counseling and related educational programs" (CACREP, About Accreditation, 2006, ¶ 2).

3. Mission: To promote professional competency through (a) development of preparation standards, (b) encouragement of excellence in program development, and (c) accreditation of professional preparation programs.

4. Core Values: To promote (a) quality counselor training, (b) ethical decision-making processes, (c) protection of the public, (d) growth and collaboration, and (e) strengthening standards to encourage best practice (CACREP, About Accreditation, 2006).

Each of these CACREP components guides its accrediting process of applicable institutions which in turn, encourages professional counselor training standards.

CACREP programs educate future counselors in eight core curricular areas in accordance with the national standards. While not all counselor training programs are CACREP-accredited, most state licensing bodies recognize the CACREP standards and core curriculum as the model for quality counselor training (CACREP, About

Accreditation, 2006). The eight core curricular areas for counselors-in-training are the following:

1. Professional Orientation and Ethical Practice: Studies that provide an understanding of (a) history and philosophy of counseling; (b) professional roles and functions; (c) responsibilities as an interdisciplinary team member during emergency management; (d) self-care strategies; (e) counseling supervision models; (f) professional organizations; (g) credentialing; (h) advocacy; (i) barriers to equity; and (j) ethical standards.

2. Social and Cultural Diversity: Studies that provide an understanding of (a) multicultural trends and diversity within groups; (b) attitudes and beliefs affecting work with culturally diverse clients; (c) theories of multicultural counseling; (d) strategies for advocacy; (e) the development of cultural self-awareness, growth, and wellness; and (f) counselors' roles in eliminating discrimination and oppression.

3. Human Growth and Development: Studies that provide an understanding of (a) theories of lifespan development; (b) theories of learning and personality; (c) effects of crises and trauma; (d) theories of resilience; (e) exceptional abilities and alternative interventions; (f) human behavior; (g) additions; and (h) theories for encouraging optimal human development.

4. Career Development: Studies that provide an understanding of (a) career development theories; (b) resources for career market information; (c) organizing, implementing, administering, and evaluating career programs; (d) interplay between work, family, and other life roles in career

development; (e) educational planning; (f) assessment instruments; and (g) career counseling processes.

5. Helping Relationships: Studies that provide an understanding of (a) wellness and prevention; (b) the counselor role in the helping process; (c) interviewing and counseling skills; (d) counseling theories; (e) systems perspectives; (f) consultation; and (g) crisis intervention and suicide prevention models.

6. Group Work: Studies that provide an understanding of (a) group dynamics; (b) group leadership approaches; (c) theories of group counseling; (d) group counseling techniques; and (e) participation in a small group experience.

7. Assessment: Studies that provide an understanding of (a) the history of assessment; (b) basic concepts in assessment techniques; (c) statistical concepts; (d) reliability; (e) validity; (f) social and cultural influences in assessment; and (g) assessment ethics.

8. Research and Program Evaluation: Studies that provide an understanding of (a) the importance of research; (b) research methods; (c) statistical methods; (d) principles of research, assessment, and evaluation; (e) evidence-based practice; and (f) research and evaluation ethics. (CACREP, 2009, 2009 Standards).

In addition to the eight core curricular areas, school counselors-in-training are required to receive additional knowledge and skills training and education in the following eight domains:

1. Foundations: Studies that provide an understanding of knowledge and skills in (a) school history, philosophy, and trends; (b) ethical and legal concepts; (c) school counselor roles and functions; (d) professional organizations; (e) school counseling program models including ASCA; (f) student growth and development, abilities, multicultural issues, resiliency, and learning; (g) understanding school emergency management roles and responsibilities during crises; (h) adhering to ethical and legal standards; and (i) advocating for school counselor identity and programs.

2. Counseling, Prevention, and Intervention: Studies that provide an understanding of knowledge and skills in (a) theories of wellness and effective counseling; (b) developing counseling programs to promote academic, career, and personal/social student development; (c) strategies for identifying student strengths and environmental influences; (d) student transition beyond school; (e) group dynamics; (f) the impact of crises on students, educators, and schools, as well as intervention for such crises; (g) self-awareness and sensitivity; (h) individual counseling, group counseling, and classroom guidance; (i) prevention and intervention plans for developmental, wellness, language, ability, multicultural, and resiliency issues; (j) managing suicide risk; (k) understanding school counseling limitations and the need for supervision.

3. Diversity and Advocacy: Studies that provide an understanding of knowledge and skills in (a) cultural issues affecting student learning; (b) systemic issues enhancing or debilitating student development; (c)

educational policies; (d) multicultural counseling issues; (e) developing multicultural competency; (f) advocating for student learning and academic growth; (g) advocating for policies that positively impact the school environment; and (h) working with parents and guardians to encourage student development.

4. Assessment: Studies that provide an understanding of knowledge and skills in (a) multiple factors affecting student development and functioning; (b) signs and symptoms of substance abuse; (c) identifying forms of needs assessments; (d) recognizing student strengths and uniqueness; (e) selecting appropriate assessment tools; (f) analyzing assessment information; (g) making referrals; and (h) assessing barriers negatively impacting student development.

5. Research and Evaluation: Studies that provide an understanding of knowledge and skills in (a) evaluating school counseling research; (b) models for school counseling program evaluation; (c) evaluating outcomes; (d) accountability; (e) school counseling best practices; (g) applying relevant research to school counseling; (h) measuring outcomes; and (i) employing relevant data to improve the school counseling program.

6. Academic Development: Studies that provide an understanding of knowledge and skills in (a) recognizing the school counseling program in relationship to school mission; (b) conceptualizing achievement gaps and promoting student success; (c) curriculum design; (d) implementing

programs to improve student academic progress; (e) preparing students for post high school experiences; and (f) instructional strategies.

7. Collaboration and Consultation: Studies that provide an understanding of knowledge and skills in (a) the family-school-community partnership needed to facilitate student development and learning; (b) strategies for effective teamwork; (c) working with school staff, parents, and community members; (d) systems theories; (e) strategies for empowering parents and guardians to advocate for their children; (f) peer programming interventions; (g) school and community collaboration models for crisis preparedness and response; (h) working with parents and guardians regarding issues affecting the student; (i) locating community resources; (j) consulting with teachers, school personnel, and community organizations on behalf of the student; (k) peer helping strategies; and (l) referrals.

8. Leadership: Studies that provide an understanding of knowledge and skills in (a) effective leadership; (b) leadership strategies to improve the school learning environment; (c) providing a comprehensive counseling program; (d) recognizing the school counselor role as a system change agent; (e) recognizing the school counselor role in student assistance programs and advisory meetings; (f) preparing and evaluating a comprehensive developmental school counseling program; and (g) develops and presents school counseling programs to parents and teachers (CACREP, 2009, 2009 Standards).

Within each domain, school counselors-in-training are asked to demonstrate competency in knowledge, skills, and practices. It is through these curricular standards that school counselors-in-training receive a catalog of educational experiences to best equip them for future professional practice.

ASCA Standards

As CACREP developed in 1981 to provide educational standards to support appropriate counselor training (CACREP, 2009, About Accreditation), similarly ASCA was formed to provide standards to support school counselors in offering appropriate counseling practices and services to students (ASCA, 2010c). For that reason, it is important to discuss ASCA's underlying philosophy of education, practice, and competency for professional school counselors.

The ASCA National Model was developed to ensure adequate and appropriate services were being offered to all students within the school system. ASCA (2005) noted that throughout history, school counselors have worked to individually serve a small percentage of their students, often those who were high-achieving or at-risk. The national model offers a blueprint for an all-encompassing programmatic design to school counseling to positively affect not only students, but the school system and community at large.

Central to the ASCA National Model is its framework for comprehensive counseling services. To achieve this vision, the following four components were identified:

1. Foundation: Professional school counselors are responsible for defining goals and objectives for individual student achievement. Any school

member with developing or implementing the school counseling program should provide input regarding the foundational philosophy underlying the counseling model.

2. Delivery System: In order to offer counseling services to all students and the larger school system, guidance curriculum, individual student planning, responsive services, and systems support were identified as the four methods of counseling program delivery. Guidance curriculum is the delivery system developed to reach all students. Through the prevention-based approach of classroom guidance lessons, school counselors present counseling concepts and lessons to all students. Individual student planning involves the coordination of activities that help all students manage their learning. This delivery system may be achieved through individual or small group practice. Responsive services involves resolving immediate conflicts and responding to crisis events. Included in responsive services is the preparation needed beforehand to effective respond to sudden incidents within the school setting. Responsive services may be delivered in individual, group, classroom, or whole-school formats, depending on the situation which occurred. Lastly, system support involves professional development, consultation, collaboration, and program management, including fair-share responsibilities as a member within the school team. Often times, system support involves a more indirect support to students.

3. Management System: For whole-school organization and delivery of services, professional school counselors must work alongside administrators. ASCA has identified agreements, advisory councils, use of data, action plans, appropriate use of time, and use of calendars as key management issues for comprehensive school counseling programs.

4. Accountability: Evaluation of the comprehensive counseling program must occur to ensure that services and delivery of such services are effective and adequate for student needs. Accountability can be achieved by reporting results, adhering to ASCA school counselor performance standards, and program audits (ASCA, 2005).

In alignment with CACREP, the ASCA National Standards are conveyed to school counselors-in-training through a foundations course in school counseling (CACREP, 2009, 2009 Standards). As such, future school counselors begin to understand the comprehensive nature of counseling services within the school scene.

Changing Counselor Education

While consistent core standards drive ASCA and CACREP, mission and position statements continue to be revised and adapted to meet the growing needs of the school counseling profession. Of particular interest for the current study is the refocus on crisis preparedness and education. In the past 20 years, nearly 600 school shootings have occurred, with this statistic not representing the number of school shootings that were planned or attempted yet prevented (Wong, 2007). Furthermore, this statistic represents only school shootings as a source of crisis and trauma for students, although current research highlights natural disasters, various forms of school violence, unexpected

student and teacher death, and world events (i.e. war, terrorism, etc.) as additional causes of crisis (Daniels et al., 2007; Schonfeld & Newgass, 2003). To address the school counselors' role in mediating such crisis incidents, in a 2007 position statement, ASCA noted that "professional school counselors should be trained in a variety of crisis intervention models to help with the mitigation of stressors in students" (p. 12).

CACREP standards mirrored this need for additional crisis training education for counselors-in-training. In the 2001 citation of the CACREP standards (2008), the accrediting body detailed no specific crisis training necessary in the core standards and only broadly mentioned "knowledge of prevention and crisis intervention strategies" (p. 50) for school counselors specifically. In the updated 2009 CACREP standards, all counselors-in-training are called to receive training in "counselors' roles and responsibilities as members of an interdisciplinary emergency management response team during a local, regional, or national crisis, disaster or other trauma-causing event" (p. 9). Additionally, under the Helping Relationships core curriculum, all counselors-in-training are required to provide an understanding of "crisis intervention and suicide prevention models, including the use of psychological first aid strategies" (p. 11).

The school counseling domain standards also underwent revisions in the CACREP 2009 standards. The adapted standards require that the school counselor-in-training "understands the potential impact of crises, emergencies, and disasters on students, educators, and schools, and knows the skills needed for crisis intervention" as well as "demonstrates the ability to use procedures for assessing and managing suicide risk" (p. 40). Each of these provisions further illustrates the growing concern for

counselor education to be representative of the changing roles and responsibilities experienced by school counselors.

As no community, and certainly no school system, is immune from traumatic events (Hoheisel, 2005), it is necessary that counselor education programs appropriately prepare the future helping professional to assist in such incidents. Knowledge of the history of trauma-causing events (in schools, community and internationally), age-related trauma reactions, as well as intervention strategies are all areas of crisis education which should be available for school counselors-in-training. As such, the following section will address these elements of trauma and crisis education.

Crisis and Trauma

Trauma can be defined as an emotional reaction to a recognizable stressor leading to a range of distress symptoms (Weathers & Keane, 2007). Traumatic experiences may elicit a variety of reactions by individuals; therefore trauma is characterized as a unique experience which varies from person to person (Charkow, 1998). For this reason, it is important to note that trauma does not solely refer to frequency or magnitude of the event but rather to the human reaction to the experience (Weathers & Keane). It is due to the complex nature of trauma reactions that qualified mental health professionals are called to assist individuals in the trauma resolution process (The National Child Traumatic Stress Network [NCTSN], 2004).

Silverman et al. (2008) noted in their meta-analysis of evidence-based psychosocial treatment for children after traumatic events that posttraumatic stress disorder (PTSD) or posttraumatic stress symptoms (PTSS) were the most commonly cited reactions following trauma in 14 of 21 studies assessed (67%). Depressive

symptoms were the next most common response, occurring in 12 of the 21 studies (57%). Internalizing and externalizing symptomatology was reported in 11 of the 21 studies (52%). Lastly, anxiety symptoms were reported in 9 of the 21 studies (43%). Understanding the scope of traumatic symptoms and responses can help counselors better address the specific needs of the clients and/or students in which they are serving.

Schonfeld and Newgass (2003) differentiated between the types of victims affected by crises. Primary victims are those individuals directly injured or killed by the incident (such as students who are directly killed or injured due to school violence). Secondary victims, in contrast, are those individuals who were witnesses or survivors of the event. The final category, tertiary victims, are those individuals not directly involved with the incident although experience vicarious trauma-related symptoms due to media coverage or contact with other victims. While Schonfeld and Newgass defined victimization related to school violence, the notion of experiencing victimization at different levels (i.e. primary, secondary, tertiary) could be relevant for any crisis situation. As counselors become familiar with the potential systemic traumatization following a crisis incident, then their detection, prevention, or intervention strategies may become more comprehensive in nature.

Trauma is the *reaction* to an event, but the *trigger* for trauma is the crisis situation. Capuzzi (2002) defined crises as situations that are not usual, normal, or average. Kanel (2003) offered "the trilogy definition" of crisis to help practitioners and researchers more thoroughly understand the nature of crisis events (p. 1). The three facets of Kanel's crisis definition include (a) a precipitating event occurs; (b) the perception of

the event leads to subjective distress; and (c) typical coping methods begin to falter, thereby leading to maladaptive psychological, emotional, or behavioral functioning. Kanel's crisis definition provides professional counselors and school counselors alike a deeper understanding into the interaction between the crisis event and the traumatic experiences by the individual following the event.

Wiger and Harowski (2003) elaborated on the crisis term to provide an overview of crisis assumptions. Most crises are sudden and unpredictable with only a temporary impact. Individuals affected by the crisis incident often experience variations of psychological disequilibrium and the extent of that impact differs from person to person. While sometimes outsiders of the crisis event misattribute the traumatic symptoms experienced by victims as forms of mental illness, the authors further note that individuals in crisis are not necessarily mentally ill. Understanding the context surrounding a victim which impacts their ability to cope with crises is a primary responsibility by mental health professionals in helping to reestablish psychological equilibrium. Lastly, the authors note that a crucial aspect of treatment is crisis intervention, or planning for crisis situations and reactions before the event occurs. As mental health professionals become more familiar with the nature of crisis situations, they may then find themselves more equipped to serve as a leader in such situations.

Crisis Incidents Affecting School-Aged Children

Crises in schools can be defined broadly as "those [incidents] made by humans and natural disasters, acts of terrorisms, death of a member of the school community, sexual assault, suicide, assault, hate crimes, armed hostage events, barricades, and homicide" (Daniels et al., 2007, p. 483). With the myriad of potential crisis incidents that

could affect school-aged children, it is imperative that school counselors receive adequate training and education regarding crisis response (ASCA, 2007; Hoheisel, 2005). Additionally, three centuries of data on fears in children and adolescents have indicated that changing societal times impact the distinct fears that children have. For the 21st century, such present concerns and fears can manifest from events such as war, hurricanes, terrorist attacks, and school shootings (Burnham, 2009). For the purpose of this review of related literature and study, a four-part distinction of school crises will be used. School crises will be subcategorized into school violence, unexpected student and teacher death, environmental disasters, and world events (i.e. war, terrorism, etc.) (Daniels et al., 2007; Schonfeld & Newgass, 2003).

School Violence

School violence has been a growing concern following an influx of school shootings over the past two decades (Wong, 2007). While the incidence of school shootings is increasing, this category of school violence is not the only form of violence experienced at school. School violence is defined as "any behavior that violates a school's educational mission or climate of respect or jeopardizes the intent of the school to be free of aggression against persons or property, drugs, weapons, disruptions, and disorder" (Center for the Prevention of School Violence, 2002). The more comprehensive definition encompasses a broader scope of behaviors that constitute "violence." The following section seeks to identify specific incidents of school violence which have impacted school scenes in the United States.

The Columbine High School massacre was a school-related crisis which created an upsurge of interest in school violence (Wong, 2007). On April 20, 1999, Dylan

Klebold and Eric Harris entered Columbine High School with the intention of initiating a devastating massacre. With duffle bags filled with homemade explosives, externally detonating pipe bombs, and semi-automatic weapons, the two students moved throughout the halls of Columbine High School killing 12 students and 1 teacher, wounding dozens of others, and lastly killing themselves (Brooks & Merritt, 2002).

Sandra Austin (2003), the past president of the Colorado School Counselor Association, wrote an anecdotal piece entitled "Lessons Learned from the Shootings at Columbine High School." The author sectioned the reflection paper into two focus areas: (a) immediate response and (b) long-term impact of school shootings. For immediate responses, following the massacre several affected individuals dealt with grief related to fleeing the scene versus helping others escape. School counselors must be prepared to work with individuals who experience blame, shame, and guilt. In this process, empathy (Lerner et al., 2003; Schonfeld & Newgass, 2003), warmth (Schonfeld & Newgass), and support (Charkow, 1998; Schonfeld & Newgass) are crucial counseling skills to embody when working with the victim. The author also noted that teamwork across the school system and community are vital for disseminating information and organizing resources. Group discussions and public forums are a means to relay relevant information to the largest number of people while also assuring that individual needs are being meet. Lastly, seeking resolve and support through people, hobbies, and organizations can help the individual make sense of the crisis in the immediate days following an incident.

For minimizing long-term impacts, the author explained the support needed by students and school personnel alike. For example, educators may experience grief and loss related to teaching a class with the absence of a student who was murdered.

Counselors need to make themselves visible and available to students and staff in the aftermath of tragedy. Partnering with community teams and counselors from outside schools is one way to provide additional counseling and mental health professionals to the school scene. Other research has detailed the positive benefits of collaborating with community organizations to offer needed services to those affected by crisis (NASP, 2004; Schonfeld & Newgass, 2003).

Austin also suggested that counselors seek therapy or support as needed. As the school counselor's emotional reservoir may be exhausted due to providing services to an extensive group of people, it is pertinent that he or she maintain self-care and balance. The need for counselor self-care following a crisis has been well-established in research (Lerner et al., 2003; NCTSN, 2004; NYSED, n.d.). Through involvement with this school crisis incident, Austin has offered other professional school counselors specific considerations for effective crisis management. Central to her suggestions is that school counselors need ongoing training and practice in crisis management and intervention.

Arman (2000) also reflected upon the steps taken by school counselors following the Columbine massacre and relayed interventions that have been instituted since the 1999-2000 school year. The author recommended that individuals should move away from asking "why did this happen" and begin focusing on solutions and preventative measures for potential future instances. Offering trauma services to those dealing with tragedy continued to be a primary concern, with such services being an interdisciplinary responsibility of school counselors and community mental health workers. Also, educating students in large-group guidance about trauma, grief, loss, and effective coping strategies was a new objective in the upcoming year. The author ended by discussing the

challenges of instituting a "no tolerance" policy for violence as some students show grief through externalizing symptoms which can be misinterpreted as aggression.

Hostage incidents are another form of violence which may occur within the school scene. Daniels et al. (2007) conducted a qualitative analysis of school personnel involved with an armed hostage event to unfold specific roles and responsibilities voiced by the school counselor during the incident. The hostage situation involved a 17-year-old male in a small rural town in the Western United States. The perpetrator had a history of depression and suicidal ideation and had been receiving treatment for these issues. Following a safe resolution of the hostage incident, the perpetrator received counseling and served time in a juvenile center. While the qualitative objective for this study was to reflect experiences by the school personnel, within the research design, a case study of the school counselor was conducted. As such, the school counselor's lived experiences before, during, and after the hostage incident was captured.

From the school counselor interview, the following findings were reported:

1. Specific roles: When asked what role the counselor played in the hostage event, 50% of the participant's answers involved an active school counselor role. For example, the counselor reported having (a) followed up on rumors about the student prior to the event; (b) met with students and parents after the hostage event; (c) offered resources to parents; and (d) coordinated mental health services within the school scene following the event. Nearly one-third of her responses involved communicating with outside counseling professionals, a collaborative approach which is supported by other research (NASP, 2004; Schonfeld & Newgass, 2003)

2. Systemic conditions: When describing the school conditions that helped prevent the hostage incident from becoming lethal, nearly 44% of the participant's responses reflected the steps the school had taken prior to the incident to ensure a safe school for all students (i.e. faculty and staff in the hall before and after class, security in the building, etc.).

3. Attributions of success: When asked what she attributed to the successful non-violent ending to this incident, the participant noted the courage of the teacher and the ability of those involved to stay calm. She also reflected on the positive relationship that the teacher, principal, school resource officer, and peers had with the perpetrator.

4. Advice to other professionals: The participants offered the following two pieces of advice for other school personnel who may experience a similar crisis incident: (a) develop relationships with all students and (b) continue to get training in crisis intervention.

The findings by Daniels et al. (2007) highlight the need for solid, supportive relationships between students and school personnel in safeguarding against potential school violence. Additionally, the recommendation by the participant for continued education in crisis intervention and response lends credence to the necessity for crisis preparedness training by all who may be affected by crisis incidents.

Each of these aforementioned articles communicates lessons learned by school counselors who have directly experienced a crisis incident in the school. "A specific tragedy cannot be prepared for, but plans can be made for a specific response to a catastrophe" (Collison et al., 1987, p. 390). It is through these lived experiences that

changes in policy and procedures in the wake of crises can be considered and more effective management can be implemented.

Unexpected Student and Teacher Deaths

Suicide and sudden death are other forms of crisis which have become common to school environments (Thompson, 1995). In fact, suicide rates among adolescents have more than tripled since the 1950s (King, 2001). "When a student commits suicide, many others are placed at risk for serious mental health problems" (Celotta, 1995, p. 397). However, suicide is only one form of "unexpected death" that may impact the psychological stability of children. Sometimes death is unexpected due to injuries sustained in car wrecks, violence, or other situations. For this reason, it is important that school counselors and personnel are equipped to identify students at-risk for suicide and to work with other students experiencing psychological disequilibrium following an unexpected death. The following section will identify research related to suicide detection and crisis management following a suicide. Next, research will be presented regarding other forms of unexpected death and the elements of these crisis situation in which school counselors can help manage.

Suicide

Capuzzi (2002) discussed the importance of identifying students at risk for suicide by assessing the context surrounding the child. By compiling results found in prior research, the following risk factors have been identified:

1. Suicide rates are higher for adolescent males than for females, although females attempt suicide at a three to four times higher rate (Canetto & Sakinofsky, 1998).

2. Caucasian males complete suicide at higher rates than any other ethnic group (Popenhagen & Qualley, 1998).

3. History of affective, conduct, antisocial personality, or substance abuse disorders increase suicide risk.

4. Currently having a terminal or physical illness may cause an adolescent to be at higher risk for suicide (Capuzzi, 1994).

5. Experience with a family member or friend's suicide may increase potential risk for suicide.

6. Encountering a precipitating event (i.e. peer or relational conflict, major life events, limited family support) could be a precursor to suicide risk.

Knowing suicidal risk factors can help with detection and prevention of suicide incidents (Capuzzi, 2002; Popenhagen & Qualley, 1998). Of particular interest for school counselors is an additional risk factor identified by Hoberman and Garfinkel (1988) (as cited by Capuzzi, 2002). After reviewing records of individuals aged 19 and under who experienced a nonnatural death, 229 suicidal deaths were identified. Of those sampled, 19% of the suicidal deaths were precipitated by an argument with a boyfriend, girlfriend, or parent. Fourteen percent of the suicidal deaths were precipitated by school problems. Results from the Hoberman and Garfinkel study, along with the other risk factors as identified by Capuzzi, offer a baseline for detection and prevention of suicide for school-aged children.

King, Price, Telljohann, and Wahl (1999) conducted a study to assess how competent high school counselors felt in recognizing students at risk for suicide. Participants consisted of 186 randomly selected ASCA members. High school counselors

answered a 45-item survey to examine efficacy and outcome expectations in recognizing suicide symptoms in adolescents. Seventy-four percent of participants indicated that one or more of their students had attempted suicide, and 87% believed they had the responsibility to identify such students at risk. With this said, only 38% of participants reported feeling competent in recognizing the warning signs of suicide. Implications for this study highlight the need for continued education in identification and intervention strategies for suicide.

King (2001) identified the primary, secondary, and tertiary prevention strategies needed to ensure school safety before and after suicide. Primary prevention includes whole-school activities and services available to help decrease students desire to attempt or complete suicide. The author suggested the following steps for primary prevention of suicide:

1. Develop a school-wide policy on student suicide therefore conveying the school personnel's' interest in creating a safe school environment. The policy should include several elements, including (a) a statement concerning the priority of suicide prevention within the school; (b) the procedures school personnel will take when they believe a student is at-risk for suicide; (c) the procedures school personnel will take when a student has threatened or attempted suicide on school property; (d) how school counselors will assess suicide lethality; (e) how school personnel will manage the school days following a suicide; and (f) how suicide prevention programs will be evaluated.

2. Educate school staff on suicide warning signs and risk factors. In-service educational opportunities should be offered frequently to ensure teacher and school personnel efficacy in detecting potential warning signs and indicators.

3. Encourage interdisciplinary collaboration with educators, school counselors, nurses, and other personnel who can assist with detection and prevention. Training programs are one means to encourage this partnership. Through adequate training, school personnel may have increased awareness about warning signs, treatment resources, and referral options available to students at-risk.

4. Include suicide prevention education in the teacher's curriculum. As teachers can help students understand the warning signs to suicide, students increase their understanding and knowledge of suicide indicators and develop "more positive attitudes toward help-seeking behaviors with troubled peers" (p. 57).

5. Develop peer-assistance programs to help students understand the warning signs of suicide and contact an adult as necessary. Such programs offer students a step-by-step means to refer troubled peers to a counselor or support staff for help, if suicide warning signs are present.

6. Implement school-wide activities to enhance the sense of community at the school. "Students who feel connected to their school (e.g., feel teachers treat them fairly, feel close to people at school, feel a part of their school) are less likely than students who don't feel connected to have seriously

considered or attempted suicide..." (p. 58). To promote school community, counselors can provide in-service training to faculty and staff about student needs, involve students in decision making, develop peer mentoring programs within the schools, promote student clubs and organizations, and encourage student learning groups. Each of these opportunities connects students-to-students and students-to-staff to facilitate student involvement.

7. Partner with parents to increase dialogue and information dissemination concerning suicide and related prevention programs. Collaborating with parents involves offering parents an opportunity to become active participants in school activities and community partnerships. Furthermore, parent partnerships are nurtured when parents are kept up-to-date regarding program policies and prevention activities.

8. Develop school-community partnerships. School counselors should be aware of and have access to community organizations and agencies which may assist in suicide prevention programs. Systemic resources within the community may also facilitate appropriate referral options for students, as needed, if students are at-risk for suicide.

9. Establish a school-based crisis intervention team to plan intervention strategies before a suicide occurs. The crisis intervention team should include school professionals such as administrators, counselors, educators, and the school nurse. A formal suicide prevention and intervention plan should be developed to facilitate restabilization following a student's threat

or attempt to suicide. Intervention training should be conducted annually to ensure that team members are prepared to intervene as necessary.

Secondary prevention occurs once a student has threatened or attempted suicide. King (2001) delineated the following steps for secondary prevention:

1. Ensure student safety by talking with the student at risk for suicide, actively listening, remaining with the student, and referring as necessary. Such conversations should occur in a pre-arranged, nonthreatening environment where the student is removed from contact with other students. When talking with the student, the school counselor should assess whether the student has a specific suicide plan in place and what means, if any, her or she has to execute the plan.

2. Assess the student's suicidal risk. Risk can be categorized into the following three levels: (a) extreme risk- student has a plan to commit suicide, has the means to execute the suicide plan, and will not relinquish the weapon; (b) severe risk- student has a plan to commit suicide but does not currently have a weapon or means to execute the plan; and (c) moderate risk- the student has suicidal thoughts but no specific plan or means to carry out the suicide. Through the assessment of suicide risk, appropriate services to the student can then be implemented.

3. Based on the suicide risk assessment, determine the mental health services that the student needs. If the student is assessed to be at extreme risk, the school counselor should stay with the student, encouraging him or her to talk about his or her thoughts and feelings, while trying to remain calm.

The objectives to working with a student at extreme risk is to (a) prevent the student from carrying out the suicide plan, and (b) move other students and staff to safety. If the student is assessed to be at severe risk, the school counselor should talk with the student about reasons behind wanting to attempt suicide. The crisis intervention team should be contacting a community mental health agency that could help with the suicide intervention. Additionally, the student's parents or guardians should be notified of the situation. The student may need to be transported to the closest emergency room or hospital. If the student is assessed to be at moderate risk, steps for working with students at severe risk should be followed. In these situations, community mental health agencies may choose not to be involved. In such cases, the student's parents or guardians should be contacted and offered appropriate resources for available help to the student and family.

4. Follow-up to ensure the student received appropriate services. Whether the service was emergency management or referral services, the school counselor should continued support and concern, and follow-up frequently.

5. Through the use of the crisis intervention team, lastly, debrief school staff. Staff members should be encouraged to process their thoughts and feelings about the incident and the procedures taken to mediate the issue. Based on staff feedback, the crisis intervention team can then assess the effectiveness of their intervention strategies and modify steps as needed.

Lastly, tertiary prevention, also known as postvention, includes those activities that occur following a student's threatened, attempted, or completed suicide. Postvention should occur within in the first 24 hours. Assessing other student risk and detecting those who may "copycat" (p. 61) is of utmost concern for the school counselor (Celotta, 1995; King, 2001).

Celotta (1995) discussed the specific postvention responsibilities by school counselors in the aftermath of a suicide. The author noted that contagion, or suicide attempt or completion due to identification and modeling of the original suicide tragedy, is the most pressing concern following a student suicide. As such, school counselors must be aware of suicide warning signs such as behavioral changes, extreme moods, ineffective coping strategies, physical problems, extremely low self-esteem, or verbalized death statements. Disseminating written procedures and information to school staff is an effective means to convey relevant information and minimize miscommunication among school leaders. Celotta suggested that one way to adequately intervene after a suicide is to have planned appropriately beforehand. Organizing postvention and crisis intervention teams through community collaboration is not only helpful, but essential, for providing appropriate student services in the wake of a tragedy. Lastly, referring students at potential risk for self-harm or suicide to a community mental health specialist is the final step in postvention and crisis intervention following suicide.

Thompson (1995) similarly detailed the school counselor's role after suicide or sudden death within the school community. Of primary concern is the school counselor's ability to detect student reactions to the death and intervene as necessary. Examples of survivor reactions may include denial, anger, blame, shame, guilt, fear,

intellectualization, or hostility. Such behavioral and emotional displays are mirrored in other suicide research (Capuzzi, 2002; Celotta, 1995). The author noted that some students feel ashamed to display their emotions or reactions to the suicide in public, therefore the hidden grief and associated feelings may be difficult to detect. It is important for school counselors to recognize that postvention efforts may extend three to four weeks (if not longer) following the tragedy, thus coordinating community support and partnerships is vital for crisis preparedness (Celotta; Schonfeld & Newgass, 2003; Thompson).

While suicide detection, prevention, and intervention is extensive for the school counselor to coordinate (Capuzzi, 2002), it is when these plans are developed prior to the incident that adequate implementation occurs (Celotta, 1995; Sorensen, 1989; Thompson, 1995). As such, school teams should have a working plan in place. It is education in crisis management, and specifically the steps needed to disseminate information and help individuals handle distress after unexpected deaths, that can help individuals move through trauma and reestablish equilibrium.

Other unexpected deaths

Suicide is just one form of unexpected death that can impact students. "Schools often respond well in the moment, but usually focus on the students who are directly impacted by the death -- the team the student was on, his closest friends, kids in his classes. Schools that go further, using each tragedy as a teachable moment, go well beyond providing support for the grievers and actually begin to build a culture of acceptance and tolerance, teaching empathy and compassion within the school" (Lovre, 2003a, p. 7).

While much literature exists about the child and adolescent grief and loss process (NCTSN, 2004), little research exists on how school counselors can most effectively work with *students* in a school setting following the death of another person (Servaty-Seib, Peterson, & Spang, 2003). Servaty-Seib et al. (2003) surveyed 41 Midwestern school counselors and found that 85% ($n = 35$) reported not having a written policy in place regarding how to inform individual students of the death of another person. The authors offer suggestions for communicating loss to students, such as talking to students in an "unhurried, comfortable, and private atmosphere" (p. 176). Doing so offers an individualized helping relationship with the student to promote safety and support in the grief process. The authors further define the school counselors' role as a "listener, supporter, director of aftercare, and referral agent" (p. 180), advocate, manager, and policy setter. In these various roles, the school counselor provides immediate and long-term services to the student who is dealing with grief or loss related issues.

Kandt (1994) discussed the differing roles of grief counselors, clinical counselors, and school counselors in working with students after experiencing the death of another. The school counselor often serves as the crisis counselor, and as such, recommendations were made to assist in the aftermath of such crisis incidents. School counselors should be well versed in the grief process, understanding that students will react differently based on a variety of variables. For example, due to peer stigma, some students may have difficulty expressing their thoughts or feelings about the incident. Outside stressors, such as familial or community support, may also impact a student's ability to grieve. Recognizing what impacts a student's opportunity to grieve can better assist the counselor in providing appropriate services to the student. Students may also experience abnormal,

delayed, exaggerated, or masked grief reactions. In providing continual student support, the school counselor should be prepared to intervene in the immediate days following the incident as well as in a more extended capacity. The author noted that grief support groups may be one means to providing extended support.

Another component to effectively working with students in the aftermath of an unexpected student or teacher death is to understand how students cope with such crisis incidents. Swiharta and Silliman (1992) conducted a mixed-methods case study to assess student coping processes after the loss of a fellow classmate due to an illness. Of the 140 students surveyed, 94 useable questionnaires were collected. Results indicated that students were significantly affected by the death of their peer, with 96% of students reported some emotional impact following the death. Initial feelings were reported as very sad, shocked, angry, and numb by 67%, 45%, 42%, and 34% of the participants, respectively. Furthermore, 83% of participants reported thinking of the student and his death often in the first week, and 39% of participants reported 4 or more thoughts about the student's death per day. When surveying the long-term effects of the death, 18 months following the student's death, 52% of the participants reported thinking about the student once in a while and 15% reported thinking of the student frequently. Results from this study indicate the short and long-term effects of death for students. As such, school counselors must be prepared to handle the immediate traumatization as well as the trajectory of potential traumatization due to a student or teacher death.

Environmental Disasters

Crisis incidents beyond the school setting also impact the lives of students while at school. Research has increased across the past decade regarding children's responses to

natural disasters (Baggerly & Ferretti, 2008; Lonigan et al., 1998). For example, in a

2009 survey of current childhood and adolescent fears, hurricanes and tornadoes ranked

18th on the "top 20" list (Burnham, 2009). High media attention following environmental

crisis incidents can lead children to experience tertiary victimization (Schonfeld &

Newgass, 2003). As previously mentioned, tertiary victimization occurs as children

experience psychological trauma following a crisis incident due to media exposure or

contact with secondary victims. Such psychological trauma can have both short and long

term impact (Carr, 2004), thus addressing such issues is pertinent for reestablishing a

balanced psychological state.

Lonigan, Anthony, and Shannon (1998) conducted a study to assess diagnostic

efficacy of posttraumatic symptoms in children who had been exposed to an

environmental disasters. The study included 5,687 children who had exhibited distress

symptoms following Hurricane Hugo, a category IV hurricane that hit landfall just north

of Charleston, South Carolina, on September 21, 1989. Participants completed a modified

version of the Frederick Reaction Index for Children (RI; Frederick, 1985), a 20-item

self-report instrument used to assess 17 diagnostic PTSD symptoms and 3 other

symptoms associated with PTSD. The Revised Children's Manifest Anxiety Scale

(RCMAS; Reynolds & Richmond, 1985), a 37-item true-false inventory, was also

administered to assess self-report levels of trait anxiety. Results indicated that each of the

20 RI items was reported by the children with at least low-level severity. Children who

reported behavioral and emotional avoidance symptoms were more likely to also have

posttraumatic stress symptoms, with avoidance/numbing being the cluster most

represented. Implications from this study lend support that while symptoms for a full

diagnosis of PTSD may not be present, PTSS symptoms may persist in children in the aftermath of natural disasters, hence detection and screening are necessary.

Similarly, La Greca, Vernberg, Silverman, and Prinstein (1996) investigated the effects of Hurricane Andrew on posttraumatic stress symptoms in students grades 3-5. Participants included 442 children at three elementary schools in Dade County, Florida. Assessment measures included the Posttraumatic Stress Disorder Reaction Index for Children (RI; Frederick, 1985), the Hurricane-Related Traumatic Experiences (HURTE; Vernberg et al., 1996), the Social Support Scale for Children (SSSC; Harter, 1985), Kidcope (Spirito, Stark, & Williams, 1988), and the Life Event Schedule (LES; Coddington, 1972). Children were surveyed at three, seven, and ten months following Hurricane Andrew. Results indicated that children's PTSD symptoms decreased over the ten-month period although 12% of the children continued to report severe to very severe levels of PTSD at Time 3. Additionally, 18% of all participants continued to show symptoms in all three PTSD clusters (intrusive recollection, avoidant/numbing, hyper-arousal) at Time 3. This study highlights the persistent effects of PTSD and PTSS following natural disasters, thus the need for mental health counselors to continue monitoring and intervening with children following such crisis events.

As school counselors are responsible for children's emotional and social well-being, they are also responsible for aiding academic achievement. When students feel fearful, it can become an obstacle to their learning process (Hernandez & Seem, 2004). Baggerly and Ferretti (2008) conducted a study following a series of hurricanes to assess the academic impact that hurricane trauma can have on student achievement. In 2004, Florida was hit by Hurricanes Charley, Frances, Ivan and Jeanne over a four-month

period causing over $42 billion in damage. Baggerly and Ferretti evaluated 55,881

Florida student's scores on the Florida Comprehensive Assessment Test (FCAT)

following the 2004 hurricanes to see if these natural disasters impacted the FCAT

Developmental Scale Scores (DSS), or the yearly academic gain. Using purposeful

sampling, students were selected representing grades 4 through 10 within 7 of the highest

damaged and 7 of the lowest damaged districts within Florida. The multivariate analysis

of covariance (MANCOVA) results for FCAT DSS scores in math and reading when

controlling for gender, ethnicity, free or reduced lunch, and grade level indicated that

students in the high-impact schools had less gain than did students in the low-impact

schools $F(2, 55,874) = 45.67$, $p < .001$, $\eta^2 = .001$. While the results were statistically

significant, they were not practically significant, with the differences in scores due to the

hurricanes only accounting for less than 1 percent of the variance. In other words, it

cannot be assumed that experiencing hurricane-related crisis leads to people to losing

academic skills. Results from this study directly challenge prior findings concerning the

lasting impact of trauma symptoms due to hurricanes (La Greca et al., 1996).

　　　　While the aforementioned study found non-practical significant results for trauma

impact in students after a hurricane, caution must be given that school counselors do not

interpret such results to mean that crisis intervention is not needed following a natural

disaster (Baggerly & Ferretti, 2008). In fact, Hebert (2007) outlined suggestions for

school counselors working with students after hurricanes and other environmental crises.

School counselors can employ play therapy techniques to offer children a non-directive,

safe outlet to express trauma-related feelings. As children may experience anger,

powerlessness, and vulnerability, the author suggests that school counselors provide

activities that encourage children to express a full range of feelings. Such activities may provide a supportive opportunity to initiate a grief reaction. School counselors can also help students develop coping strategies for dealing with their feelings. Activities that serve as stress relievers and empowerment exercises can serve as means to facilitate this restabilization.

Natural disasters have increased nearly 70% in the past decade, from 319 disasters in 1986 to 1995 to 545 disasters from 1996 to 2005 (Baggerly & Exum, 2008). As schools often serve as the safe place for children in the aftermath of environmental trauma, it is important that school counselors are well-equipped to handle the spectrum of feelings that children may experience (Herbert, 2007).

War and World Events

America's youth have recently been exposed to much war-related trauma following the 9/11 terrorist attacks and the invasion of and war in Iraq (Burnham & Hooper, 2008). In fact, in a recent studying surveying the top 20 current childhood and adolescent fears (involving a sample of 1033 participants), terrorist attacks ranked 11th in overall fears (Burnham, 2009). "No matter how hard society tries, it is a futile endeavor to hide death from children" (Charkow, 1998, p. 117). The media plays a major role in informing children about the severity of war-related and other world incidents (Lernet et al., 2003; Schonfeld & Newgass, 2003). Such witnessing of world-events can create traumatic symptomatology in children, even though they are not directly involved (Auger et al., 2004; Schonfeld & Newgass). As such, school counselors must be prepared to help students cope with feelings elicited due to overexposure (Lerner et al.).

Burnham and Hooper (2008) studied the impact of the war in Iraq on children ages 7-17. Convenience sampling was used to survey 137 elementary, middle, and high school students pre-invasion and 82 students post-invasion. The American Fear Survey Schedule for Children and Adolescents (FSSCA-AM; Burnham, 1995), a 98-item self-report survey, was used to assess student fears. A 2 x 2 x 3 analysis of variance (ANOVA) was conducted to analyze the following variables: gender (female versus male); year (1995 versus 2003); and age (7-10 versus 11-14 versus 15-18). Results indicated that girls were significantly more fearful than boys across both year groups. Additionally, older children tended to report less fearful scores. The post-invasion sample reported more war-related fears and an age and gender difference did exist between pre- and post-invasion samples. While a limitation to the study is that the data were not longitudinal but rather cross-sectional, the results still demonstrate the self-reported fear differences in gender and grades. Findings from this study suggest that both younger children and female subgroups of students may experience more fear related to war and world events. Such findings offer school counselors a more defined understanding of war-related reactions of school-aged children.

Auger et al. (2004) were interested in assessing student reactions following the 9/11 terrorist attacks. A questionnaire was created by the researchers to investigate 89 Midwestern school counselors' and administrator's perceptions of student responses following the attacks. Open-ended questions inventoried the following four areas: (a) student behavioral changes; (b) student concerns immediately after and 6 weeks after September 11, 2001; (c) school responses to meet student needs; and (d) actions taken by participants to respond to September 11 attacks. Results indicated that 65% of

participants reported their students experienced distress following the attacks. The most frequent behavioral change was an increase in fear, anxiety, and worry, as reported by 44.9% of participants. Anger and aggression were the second most reported behavioral changes (14.6%). Student concerns included fear of additional attacks (36.0% of participants) followed by fear of self or others being drafted (31.5% of participants). Seventy-four percent of participants reported having a moderate to high level of emotional distress following September 11, however 87% reported that their own level of distress interfered with their ability to work with children slightly or not at all. Sixty-seven percent of the schools used at least one method to notify students of the attacks. While 47.2% percent of participants indicated that their school increased access to counseling services as needed, 12.4% of respondents indicated that their school took no additional measures to meet student needs. Lastly, 32% of participants indicated that their level of preparation for crisis intervention was inadequate.

The aforementioned study has limitations, including the segregated region chosen for assessment. Generalizability of results is difficult due to the Midwest region being the only section of the states surveyed. Other states more directly involved with the attacks may have indicated different responses. With this said, results from this study illustrate the impact of world-events on student and staff coping, as well as the voiced need by school counselors for more adequate training in crisis management after world crises (Auger et al., 2004).

Bioterrorism is another crisis incident which has been noted in recent research (Baggerly & Rank, 2005). Baggerly and Rank provided an overview of student reactions following bioterrorist threats and also offered suggestions for counselors to mediate such

incidents. In citing Auger et al. (2004), Baggerly and Rank noted that 21.3% of school counselors indicated that their students feared anthrax attacks six weeks after the 9/11 attacks. Baggerly and Rank further cited research that 16 middle school students and a teacher experienced psychosomatic symptoms on September 29, 2001 after smelling paint fumes and mistaking them for bioterrorism. On October 3, 2001, nearly 1,000 students in the Philippines believed their cold symptoms were a reaction to bioterrorism. Each incident evidences the systemic effect of bioterrorism and world-related crisis which increase traumatic symptoms in school-aged children. To mediate such incidents, Baggerly and Rank suggest conveying credible information, normalizing responses, defusing emotional instability, and offering coping strategies as means to actively lead students through negative emotional responses.

Trauma Reactions to Crisis Situations

While understanding the history of crisis incidents can help school counselors prepare for the potential of future crises, it is equally important that school counselors are well-educated in student reactions to various stressors (NCTSN, 2004). Schonfeld and Newgass (2003) asserted that for leaders within the school system, "many are not familiar with children's reactions to trauma and stress and how they relate to a child's development" (p. 7). As no two children react the same to crisis incidents, school counselors are responsible for understanding the nature of trauma, age-appropriate reactions, and means to mitigate such reactions.

Wong (2007) described three common symptoms of psychological trauma. Children often re-experience the trauma through play, nightmares, flashbacks, or distressing events. Additionally, children may avoid reminders of the event. Lastly,

children may experience behavioral differences such as sleep disturbances, irritability, poor concentration, hyper-aroused senses, or regressive actions.

Gurwitch, Silovsky, Schultz, Kees, and Burlingame (2001) delineated age-specific reactions to trauma by school-aged children. Specifically, it is important for school personnel to be knowledgeable of the range of trauma reactions by children in a school setting. With this understanding, school personnel can detect potential issues before they arise and help address children's specific needs as they move through trauma.

1. Elementary school students: Students in this age-range experience (a) worry or anxiety about safety of self and others; (b) worry about re-occurrence; (c) increased levels of distress; (d) behavioral changes such as angry bursts, (e) withdrawal, absenteeism, etc.; (f) increased somatic complaints; (g) change in school performance; (h) recreating the event through play; (i) hypersensitivity to sounds; and (j) questions or statements about the event.

2. Middle school students: Students in this age-range experience (a) worry or anxiety about safety of self and others; (b) worry about reoccurrence or consequence of war; (c) behavioral changes such as increase in hyperactivity and irritability with friends, teachers, and events; (d) increased somatic complaints; (e) discomfort with feelings such as revenge; (f) interest in gruesome details; (g) repetitive discussion about the event; (h) hypersensitivity to sound; (i) feelings of distrust or skepticism of others; and (j) repetitive thoughts and comments about death.

3. High school students: Students in this age-range experience (a) worry or anxiety about safety of self and others; (b) worry about reoccurrence, war, or school violence; (c) behavioral changes such as changes in academic performance, anger outburst or aggression, and withdrawal; (d) discomfort with feelings such as revenge or vulnerability; (e) increased risk for substance abuse; (f) discussion of event and details from the event; (g) feelings of distrust or skepticism of others; (h) hypersensitivity to sound; and (i) repetitive thought and comments about death.

While some reactions to trauma are applicable across age ranges, it is apparent that some age-specific reactions exist, such as older children becoming more concerned with the systemic effect of the crisis (i.e. war, school violence, etc.) or displaying more overtly aggressive behavior in reaction to the event (Wong, 2007). Prior research has noted the more internalized distress levels that younger children experience in the aftermath of trauma (Burnham & Hooper, 2008). As such, individuals working with children need to be well-equipped to handle to the range of reactions available to children in various age-groups following a crisis.

Understanding children's reactions to crises is vital for mediating trauma (Charkow, 1998). Additionally, understanding the framework in which children respond to trauma is equally important in providing holistic care. There are several factors that influence a child's traumatic response. Charkow offers a compilation of previous research to identify conditions that affect a child's ability to move through grief and loss specific to death.

1. Relationship to the deceased: Particularly with the death of a relative, the child loses a significant support system in their life, thus potentially more dramatically impacting the trauma reaction.

2. Cause of death: Accidental, suicidal, and violent deaths have been found to be the most difficult form of loss for children to adjust to as their questions of "why" are sometimes left unanswered.

3. Personality: An individual's sense of resiliency and ability to access feelings and emotions may affect their ability to move through trauma.

4. Previous death experiences: Whether a not a children has experienced death previously, and whether the child dealt with the grief in a positive manner, can affect their current reaction to the crisis.

5. Chronological age and development level: Children understand and make meaning of death differently based on their chronological and developmental age. For example, younger children may not understand the inevitability or terminality of death whereas older children may be overly consumed with specific details regarding the death.

6. Availability of support: Children who have responsive and caring adults around them who can offer support and understanding can help transitioning through loss.

Intervening in Crisis Incidents

Several organizations have developed educational materials for school personnel to identify and help students cope with grief symptoms (National Association of School Psychologists [NASP], 2004; New York State Education Department [NYSED], n.d.;

NCTSN, 2004). "Teachers and other school personnel play significant roles in the everyday lives of children and adolescents and can create a positive recovery environment for a child" (NCTSN, p. 6). For this reason, the following section identifies suggestions for school personnel to consider when assisting in trauma symptom intervention and reduction.

Of primary concern, school counselors and personnel should listen and be available, while also giving the child space to talk through their feelings about the issue. Prior research has noted that in responding, it can be helpful to normalize the child's feelings by explaining that a range of emotions are appropriate when reacting to an abnormal event (Lerner, Lindell, & Volpe, 2003; Lovre, 2005; NCTSN, 2004). It is important to pay attention to language used in the normalization process as grief, by nature, is a unique response (Charkow, 1998; Lovre 2003b). Referring to reactions as "normal" can trigger anger in the child as nothing may feel "normal" at that point in their trauma reaction. However, changing the language to "common" or "appropriate" may diffuse some of the unsettled feelings (Lovre, 2003b, p. 1).

Answering a child's questions can also be a useful strategy during intervention. Some children choose to discuss an event immediately after it occurred while others may avoid the topic all together. As children choose to talk about the issue, offer age-appropriate information in order to help them make sense of the tragedy and move through the grief process (Charkow, 1998; Lerner et al., 2003; Lovre, 2005; NCTSN, 2004; NYSED, n.d.; Poland, 2007).

School counselors and personnel need to create a supportive school environment and have an awareness of their reaction to the crisis event (NCTSN, 2004). As life may

feel out of control for the child (Lovre, 2005), it is important that school routines remain as normal as possible in order to reestablish stability and support (Lovre, 2003b; NCTSN; Schonfeld & Newgass, 2003). School leaders can help promote restabilization by modeling appropriate reactions. As children often look to adults for support during times of crisis, school personnel should be mindful of their reactions and model both appropriate self-care and support for others (Lerner et al., 2003; Lovre, 2003b; NCTSN, 2004; NYSED, n.d.; Thompson, 1995).

School counselors and personnel should consider modifying teaching strategies as needed. While maintaining a school routine is important, it is also necessary to be sensitive to student needs. As such, projects and assignments may need to be modified or postponed to invite children to grieve and process the event at an acceptable pace. Also, school personnel should pay attention to anniversaries or date reminders of the event in order to anticipate and prepare for behavioral changes by children in response to the crisis event (NCTSN, 2004). Poland (2007) advises school counselors to help children commemorate the event in an appropriate manner. Hasty memorializations can draw attention away from the emotional needs of grieving individuals. Likewise, permanent memorials on the school property can inadvertently signal to individuals that closure has been met thus limiting the grieving process (Schonfeld & Newgass, 2003).

Additionally, school counselors should consider how they can support students as well as their families. Children need supportive adults in their life in order to move through the grief process (Charkow, 1998). While children spend a significant amount of their weekday in the school setting, remaining time is often with family, friends, or other extended networks. School counselors need to be aware of the grieving process of parents

and other family members in order to provide support and resources as necessary. In turn, the child will have a continuity of support established between home and school (Charkow; NCTSN, 2004; Poland, 2007; Schonfeld & Newgass, 2003).

Lastly, school counselors and personnel need to make referrals as necessary. If academic performance begins to decline, the child experiences persistent emotional distress, becomes depressed, withdrawn, or non-communicative, expresses thoughts of suicide, or becomes antisocial or delinquent, the child is a good candidate for a mental health referral outside of the school setting (NCTSN, 2004; NYSED, n.d.; Schonfeld & Newgass, 2003). Each of these suggestions offered can help the school counselor feel prepared in working with students and staff in the aftermath of a crisis incident.

School Counselors' Role in Crisis and Trauma Situations

School leaders hold a prime position in helping students maintain balance before, during, and after a crisis. As students spend a significant portion of their weekdays within the school setting, it is school counselors and other available adults that children will look to in times of crisis. Greene, Barrios, Blair, and Kolbe (2004) explained the other unique features of schools that make it appropriate for crisis work including:

1. Schools are considered to be *in loco parentis*, thus they are responsible for student well-being. School personnel are permitted to transport and/or treat children in times of emergency.

2. Schools are "resources for response for their community" (p. 41). If a crisis situation were to occur, the school may be used as a shelter or command center.

3. Schools are responsible for learning, therefore lessons on emergency management and crisis are appropriate.

4. Schools maintain medical records and may be responsible for distributing medicine to disadvantaged children.

5. Schools are food service distributors. Particularly following environmental disasters, children can sustain their nutritional needs

6. Schools are where recovery services can be available. Because such a high percentage of students are housed within one building, schools are an excellent location for distributing services and resources as needed.

It is because of these specific qualities that school systems are regarded as an appropriate safe space for children in the aftermath of crisis. As stated by Greene et al., "recovery services and schools are a natural fit" (p. 41).

One key player within the school system who holds much responsibility in the wake of crisis is the school counselor. "Although school counselors are not required to possess expertise in managing every type of crisis, a sound understanding of the human response to crisis or trauma is necessary" (Daniels et al., 2007, p. 482). ASCA and CACREP have acknowledged this need in counselor training and have since revised standards to reflect this growing concern (ASCA, 2007; CACREP, 2009, 2009 Standards). Capuzzi (2002) advocates that school counselors must receive training in crisis management and postvention activities at a CACREP-accredited university or a CACREP equivalent graduate program in order to ethically be performing within their scope of competency.

Several studies have been conducted in the recent years highlighting the need for a focused curriculum regarding crisis management and intervention in counselor education. Allen et al. (2002) surveyed 236 ASCA school counselors in a national evaluation and found that 64% of participants reported having some exposure to crisis intervention training. Often, this education came through integrated coursework in other counseling classes. Fifty-seven percent of participants reported feeling less than adequately prepared to intervene in crisis situations. Only 10.6% of participants indicated that they had completed a specific course in school crisis intervention. The school counselors surveyed recommended that crisis topics be recognized as a critical issue in counselor education.

Hoheisel (2005) conducted a national survey of school counselor education program coordinators to determine if CACREP and non-CACREP programs differ in crisis coursework and importance placed on crisis coursework. A stratified random sample of 200 school counseling programs was used in the study with each Association for Counselor Education and Supervision (ACES) region being represented. Hoheisel created a survey to address 12 specific research questions. Results indicated that 23.4% of all programs did not offer crisis management preparation training to their programs. Additionally, 60.0% of those programs that did not currently provide crisis management preparation had no future plan to offer such preparation. The most frequently reported reason for not offering crisis management preparation courses was "no room in the curriculum" with "topic is too specialized" being the next most frequent response (p. 66). The majority of respondents (73.4%) rated crisis management preparation for school counseling students as very important. It is important to note that CACREP and non-

CACREP programs did not significantly differ in whether or not they offered crisis management preparation. There also was not a correlation between CACREP-status and importance placed on such courses. Results indicated a need for continued education in crisis management as reported by participants.

Barjon (2008) conducted a dissertation on the impact of Hurricane Katrina on school counselors' delivery of responsive services. Using a qualitative design, Barjon asked Louisiana school counselors 10 questions related to their relationship with the event and the environment. Sample questions included "When you returned to your position as a school counselor after Hurricane Katrina, what did you understand were your primary job-related responsibilities or duties?", "What were the most difficult job-related experiences you encountered working with students when they returned to school after Hurricane Katrina?", and "How would you describe your experiences, training, or professional development with crisis intervention?". Findings from this study indicated that of the eight participants, school counselors experienced the crisis incident differently. Some found themselves offering more empathy due to the extremely negative emotional responses by students, where others became hardened to not give the children a "crutch" (p. 70). School counselors also varied in whether their job duties shifted before and after Hurricane Katrina. Some participants noted that the focus became personal, not academic, while others noted little shift in their professional focus. An important finding from this study is that only 3 of the 8 participants (38%) reported facilitating personal counseling with children following the crisis event. Individual and group counseling are regarded as a responsive service that school counselors are responsible for offering following a crisis event (Gysbers & Henderson, 2000). The author noted that "The ASCA

Model recommends that high school counselors spend between 25%-35% of their time with responsive services, addressing the immediate concerns of students. The high school counselors in this study did not adhere to this recommendation" (p. 118-119). Suggestions and implications as identified by the author were for master's-level counselor training programs to address ecological crises (natural disasters) which can impact our K-12 student population within a crisis intervention course for school counselors.

Possibly one of the most significant findings in Barjon's (2008) study which directly relates to the current study, is the participants description of their counselor training related to crisis. Only 3 of the 8 participants (38%) had received a course in crisis intervention. One participant stated that "I had no training in crisis intervention; some training in suicide prevention, that's the closest I got to crisis intervention." Another participant noted that "I did not have crisis intervention…it is something I wanted even before Katrina…still looking for to take a class or workshop." Such statements illustrate that focused crisis topics may be offered throughout courses, but entire curriculum on crisis is lacking, and diversity of covered topics is equally insufficient.

Wachter (2006) studied the relationship between crisis training, crisis frequency experienced in school settings, and burnout for school counselors. The sample included 146 elementary, middle, and high school counselors in North Carolina. Participants completed the Crisis Intervention Descriptive Questionnaire (CIDQ; Wachter, 2006), containing two sub-scales on the CIDQ assessing master's-level and post master's-level training in crisis, and the Burnout Measure: Short Version (BMS; Malach-Pines, 2005). Results indicated that 31% of participants reported taking a semester-long crisis course with only 9% of those reporting the course as required curriculum. Eighty-three

participants (65%) noted that no crisis counseling course was offered in their master's or post-master's training. While 91 participants reported receiving some training on specific crisis topics (i.e. suicide, self-injurious behavior, physical/relational abuse, etc.) after completion of their master's degree, results from this study parallel previous findings that exposure to crisis curriculum *during* master's training is often limited (Allen et al., 2002; Hoheisel, 2005). Findings also indicated a small negative correlation between master's level training received regarding crisis and counselor burnout ($r = -.31$). This finding suggests that receiving crisis curriculum at the master's level could help mediate burnout effects in practicing school counselors.

While much research has been conducted evaluating the need for crisis training in master's-level curriculum, few studies have assessed the effectiveness of such training programs on school counselors' sense of preparedness in crisis detection and intervention. Murphy (2004) sought to assess the effectiveness of suicide prevention and intervention crisis training on master's level school counselors. Sixty-nine graduate students from three different southeastern universities participated in the study. Participants in the treatment group received a two-hour crisis intervention training. All participants completed the Revised Suicide Intervention Response Inventory (SIRI-2; Neimeyer & Bonnelle, 1997) and the Crisis Intervention and Suicide Prevention Questionnaire (CISP; Murphy, 2004).

Results indicated that participants in the treatment group indicated a significant increase in school counseling crisis intervention knowledge and sense of preparedness, comfort, and confidence to intervene with individuals in a variety of crisis-related states. While the treatment group improved over the control group on this condition, it is

important to note a non-statistical difference between groups on facilitative responses to individuals in crisis. The author suggested using role plays and experiential activities to increase intervention competency when addressing a variety of crisis incidents.

Conclusion

Because school counselors are asked to provide services to students in times of crisis, it is vital that counselor education programs adequately train school counselors in crisis intervention and management (Allen et al., 2002). "Skills and knowledge are needed to work with children and adolescents in the 21st century. The need for training is especially evident in postdisaster situations (e.g., school shootings, terrorist attacks, natural disasters) because students need to know that school counselors are accessible, helpful, and supportive during crises" (Burnham, 2009, p. 31). Research has illustrated school counselors' desire for more specific education in crisis management (Allen et al.; Auger et al., 2004; Hoheisel, 2005; King et al., 1999). Additionally, several anecdotal pieces have offered structure for crisis management preparedness, yet such articles lack empirical support (Arman, 2000; Austin, 2003; Baggerly & Rank, 2005; Celotta, 1995; Gurwitch et al., 2001; Hebert, 2007; Riley, 2000; Sorenson, 1989; Thompson, 1995; Wong, 2007). It is due to the newly revised standards for school counselor accountability in crisis management, the voiced desire by school counselors for more training, and the limited empirical studies in crisis training for school counselors that have guided the current research study.

CHAPTER THREE: METHOD

The following chapter details the research methods used in the current study. The information is organized into the following sections: (a) research hypotheses, (b) results and discussion for Pilot Study 1: Crisis Training Needs Assessment, (c) results and discussion for Pilot Study 2: Crisis Training Feedback, (d) information for the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training, (e) data collection, and (f) data analysis.

Research Hypotheses

Based on the review of related literature, the following hypotheses were created to predict the outcomes of the current study:

1. *Hypothesis 1*: Master's-level school counselors-in-training will report their initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident as below prepared (score of 59.5 or lower on the SCIT-CP total score).

2. *Hypothesis 2:* CACREP students will report higher levels of initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident than will non-CACREP students.

3. *Hypothesis 3:* School counselors-in-training will report a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training.

4. *Hypothesis 4*: CACREP and non-CACREP students will not demonstrate a significant difference on sense of preparedness following crisis and trauma training.

5. *Hypothesis 5:* School counselors-in-training will report a different sense of preparedness one month following crisis and trauma training.

6. *Hypothesis 6*: CACREP and non-CACREP students will not differ in their sense of preparedness one month following crisis and trauma training.

7. *Hypothesis 7*: School counselors-in-training will report their master's level training concerning crisis and trauma detection and intervention to be below adequate (below 3 on a 5 point scale).

8. *Hypothesis 8*: CACREP students will report a higher rating on their master's level training concerning crisis and trauma detection and intervention than will non-CACREP students.

9. *Hypothesis 9*: School counselors-in-training will report crisis training for master's-level school counselors-in-training as essential to appropriate counselor training (as indicated as a 4 or higher on a 5 point scale).

Protection of Human Subjects

The University of Arkansas's Institutional Review Board (IRB) approved the current research study prior to data collection. As the study was conducted in three phases, Pilot Study 1, Pilot Study 2, and then the Main Study, IRB submission and approval occurred across three time periods. In each phase of the research process, I followed the guidelines for research involving human subjects as detailed by the IRB. I also adhered to the ACA and ASCA ethical standards in conducting the research study (American Counseling Association [ACA], 2005; ASCA, 2010a).

Identification of the Crisis Category

In order to study the aforementioned research questions, the study was conceptualized in three parts with two pilot studies first being conducted to best prepare the crisis curriculum to be implemented in the main study. Each pilot study will be further explained in the following sections.

Pilot Study 1: Crisis Training Needs Assessment

The objective of Pilot Study 1: Crisis Training Needs Assessment was to identify the most pertinent crisis education training needed as identified by current school counselors within a two state area. Each crisis situation is unique, and as such, associated traumatic responses may differ by those involved (Murphy, 2004) or based on the level of victimization (Schonfeld & Newgass, 2003). For example, Barjon (2008) explained that "many areas of the Gulf Coast of the United States were devastated by the powerful forces of Hurricane Katrina. In the aftermath of this disaster, school counselors are responsible for providing counseling services to students and their families to help them cope with, ameliorate, and resolve traumas of the crisis incident" (p. 10-11). While natural disasters to the Gulf Region may be a primary crisis concern for school counselors, such crisis categories may be less of a concern to inland states that experience the tragedy from a tertiary victimization standpoint.

Due to this understanding that school-wide crisis management needs may differ based on location and incidence of crisis events experienced, a needs assessment was first needed in the current study. Pilot Study 1: Crisis Training Needs Assessment served to identify which type of crisis incident would most affect participants in a localized area thus defining the crisis training curriculum needed for the main study.

Participants

Professional school counselors from one school district within one state (subsequently referred to as "district counselors") and professional school counselors from one school counseling region within another state (subsequently referred to as "region counselors") were asked to participate in Pilot Study 1: Crisis Training Needs Assessment. Both district and region counselors were currently employed within a two-state area in the Midwest. Elementary, middle, and high school counselors were eligible to participate in the pilot study.

Instrument

The School Counselor Crisis Education Needs Assessment (SCCENA) is a three-item assessment followed by three demographic questions developed by the principal investigator to help identify (a) which crisis incident affects students the most within the school setting, (b) which crisis incident school counselors-in-training could be in most need of additional training, and (c) which crisis incident the school counselor expects to receive the least amount of training for in the future, as reported by current professional school counselors. This inventory offers a brief description of the four overarching areas of crisis incidents in schools (unexpected student/teacher death, school violence, war and world events, and natural disasters) which have been identified in current research (Daniels et al., 2007; Schonfeld & Newgass, 2003). The SCCENA survey instrument can be found in Appendix A.

Procedure

To gather district counselors for participation in Pilot Study 1, the school counseling coordinator for the district was contacted regarding the purpose of the main

study, the specific goal of Pilot Study 1, and then was asked to consider participation. Participation included disseminating an electronic link to the survey instrument to all district counselors. A copy of the email to the school counseling \ coordinator can be found in Appendix B.

To gather region counselors for participation in Pilot Study 1, region counselors were contacted directly by the principal investigator. Potential participants were identified via a public access listserv of school counselor emails within the region. The region counselors were contacted regarding the purpose of the main study, the specific goal of Pilot Study 1, and were asked to consider participation. A copy of the email to region counselors can be found in Appendix C.

For all participants, school counselors were sent an email with a link to an online version of the SCCENA along with an informed consent (Appendix D). Survey software from counselingtechnology.net was used to develop the survey and store collected data in a password protected document. As school counselors filled out the survey and submitted their answers, data were collected and stored within an Excel file. Approximately two weeks after disseminating the email link to district and region counselors, the online file containing the SCCENA survey data was downloaded and saved on a password protected computer in a locked office. A frequency count was then conducted to assess which crisis incident was reported most frequently, which area was in most need of additional training for masters-level counselors-in-training, and which area may receive the least training in the future. SAS system for Windows was used for analyzing results.

Results

Seventy-three (n = 73) school counselors participated in Pilot Study 1: Crisis

Training Needs Assessment. Of these participants, 28.8% (n = 21) represented district

counselors while 71.2% (n = 52) represented region counselors. The categorization of

professional school counselor status included 43.8% (n = 32) elementary school

counselors, 12.3% (n = 9) middle school counselors, 32.9% (n = 24) high school

counselors, and 11.0% (n = 8) were school counselors who worked for mixed age ranges

(i.e. elementary and middle school, middle school and high school, or elementary through

high school). The average years employed as a professional school counselor were 13.71

(M = 13.71, SD = 7.82). A summary of demographic data for participants involved in

Pilot Study 1 is reported in Table 1.

To analyze the results from the SCCENA, frequency counts were conducted for

the three inventory items. Results from the SCCENA indicate that 53.4% of participants

(n = 39) reported unexpected student/teacher death as the crisis category which affected

their students the most. School violence was reported by 37% of participants (n = 27)

followed by natural disasters by 8.2% (n = 6) and war and world events by 1.4% (n = 1).

When professional school counselors were asked which crisis area current

master's-level school counselors-in-training could benefit from receiving additional

training, 46.6% of participants reported unexpected student/teacher death and 46.6%

reported school violence (n = 34 for each crisis category). Natural disasters was reported

by 4.1% of participants (n = 3) followed by war and world events by 2.7% of participants

(n =2).

Lastly, when asked which crisis category professional school counselors expect to receive the least amount of training for in the future, war and world events was reported most frequently by 60.3% of participants (n = 44). Natural disasters was reported by 27.4% of participants (n = 20) followed by unexpected student/teacher death by 11% (n = 8) and school violence by 1.4% (n = 1). Frequency count results from the SCCENA can be found in Table 2.

Table 1

Demographic Data for Pilot Study 1 Participants

Demographic Characteristic	N	%
Location		
District Counselors	21	28.8
Region Counselors	52	71.2
TOTAL	73	100.0
Counselor Status		
Elementary	32	43.8
Middle	9	12.3
High	24	32.9
Mixed	8	11.0
TOTAL	73	100.0
Years Employed		
0-5 Years	14	19.2
6-10 Years	14	19.2
11-15 Years	18	24.7
16-20 Years	12	16.4
20 + Years	15	20.5
TOTAL	73	100.0

Table 2

SCCENA Results

	Unexpected student/teacher death		School violence		War and world events		Natural disasters	
	%	*n*	%	*n*	%	*n*	%	*n*
Which crisis category do you believe affects students in your school the most?	**53.4**	**39**	37.0	27	1.4	1	8.2	6
Which crisis category do you believe master's-level school counselors-in-training could benefit from receiving additional education/training?	**46.6**	**34**	**46.6**	**34**	4.1	3	2.7	2
Which crisis category do you expect to receive the least amount of training or education for in the future?	11.0	8	1.4	1	**60.3**	**44**	27.4	20

Note. Bolded items represent crisis category most reported by professional school counselors per each inventory item.

Discussion for Pilot Study 1

The objective for Pilot Study 1: Crisis Training Needs Assessment was to identify which crisis category current master's-level counselors-in-training can benefit from receiving additional training or education. Through the three-item SCCENA, unexpected student/teacher death was identified as the crisis category for use throughout Pilot Study 2 and the Main Study.

When assessing inventory item 1, over 53% of professional school counselors surveyed ($n = 39$) voiced that unexpected student/teacher death was the crisis incident which affected their students the most. School violence was recognized as a common crisis incident, by 37% of school counselors surveyed, however both war and world event and natural disaster crisis incidents were identified by less than 10% of school counselors as a crisis incident that affects their students the most. Therefore, from inventory item 1, the findings suggest that unexpected student and teacher death was the crisis category most affecting students, thus making it an appropriate topic for use in the current study.

Inventory item 2 on the SCCENA asked school counselors to identify which crisis area master's-level counselors-in-training could benefit from receiving additional training or education. Both unexpected student/teacher death and school violence were identified as the crisis areas which future school counselors could benefit from more education. Similarly to the first item, less than 10% of school counselors identified war and world events and natural disasters as a crisis area that future school counselors could benefit from additional training. A possible explanation for this phenomenon is that if professional school counselors see these crisis incidents affecting their students less (as identified by survey item 1), they may recommend that these areas of training are less critical for further training. Put another way, as school counselors recognized unexpected student/teacher death and school violence as the two crisis incidents affecting their students the most, they may also recommend that these two crisis areas are the most critically in need of further training and education. Results from inventory item 2 further supported the selection of unexpected student and teacher death as the crisis category for use in the current study.

Inventory item 3 asked professional school counselors to predict which crisis category they would receive the least amount of training for in the future. Over 60% of participants ($n = 44$) identified war and world events as the crisis category in which they expected to receive the least amount of training. Natural disasters ranked second highest, with 27.4% of participants ($n = 20$) recognizing this crisis category as one that they would receive little training for in the future. School violence was the crisis category in which school counselors expected to receive the *most* training for in the future, with only one participant choosing this category as the crisis incident they expected to receive the least training.

Based on the frequency counts of each inventory item, unexpected student/teacher death was the crisis category selected for the educational seminar in Pilot Study 2: Crisis Training Feedback and the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training. As unexpected student/teacher death was reported as (a) the crisis category that affects students the most and (b) that master's-level counselors-in-training could benefit in receiving additional education and training, this crisis category was selected for the next phases of the study. Further supporting the selection of this crisis category, while war and world events and natural disasters were the two crisis categories in which counselors expected to receive the least amount of training for in the future, these two categories were also reported *least* as (a) the crisis category that affects students the most, and (b) the crisis category that master's-level counselors-in-training could benefit from receiving more education and training. As such, it seemed less pertinent to offer additional training in either of these areas as school counselors indicated less of a concern in these areas through the needs assessment. In contrast, 11%

of participants (*n* = 8) stated that they expected to receive the least amount of training in unexpected student/teacher death yet this crisis area was identified as the most in need of training, based on responses from inventory items 1 and 2. Through this data analysis and interpretation process, the crisis category of unexpected student/teacher death was selected for the crisis and trauma training in the next stages of the study.

Development of the Intervention

Once unexpected student and teacher death was identified as the crisis category most in need of additional training at the master's level, the next step in research development was to compile resources pertaining to the topic in order to develop a crisis training intervention for the main study. Crisis intervention and management resources for the crisis training were acquired from the American School Counselor Association website. The following section details the development of Pilot Study 2: Crisis Training Feedback.

Pilot Study 2: Crisis Training Feedback

The objective of Pilot Study 2: Crisis Training Feedback was to obtain comments and suggestions from masters- and doctoral-level counselors-in-training regarding the presentation and content offered in a crisis training regarding unexpected student and teacher death. The crisis training topic was determined based on data analysis from Pilot Study 1: Crisis Training Needs Assessment.

Participants

Purposeful sampling methods were used to contact 7 masters-level and 3-doctoral level counselors at a Midwestern university who were not eligible to participate in the main study. Eligible masters-level participants were to be minimally at the practicum

level in their training and specializing in mental health counseling. Email addresses were obtained from the campus directory. Potential participants were contacted via email regarding the purpose of the main study and the specific goal for Pilot Study 2. A copy of the email sent to potential participants for Pilot Study 2 can be found in Appendix E.

Instrument

The Education Rating Form (ERF) is a three-item assessment developed by the principal investigator to gather feedback pertaining to the presentation of the crisis content in the crisis and trauma training. The ERF consists of two questions scored on a 5-point Likert scale and one open-ended question for general feedback. The ERF sought to gather specific feedback about the clarity of content, the variability of teaching modalities used, and suggestions to improve the overall presentation. A copy of the ERF can be found in Appendix F.

Procedure

Following Pilot Study 1, the principal investigator gathered crisis resources for unexpected student and teacher death to prepare the curriculum for Pilot Study 2 and the main study. Resources were accessed through the American School Counselor Association website. As ASCA provides an online directory of resources for professional school counselors, such resources were deemed adequate and appropriate by the principal researcher for training master's-level school counselors-in-training.

A crisis training curriculum manual was developed to address key terms, traumatic responses, suicide detection and intervention, and school-wide management following the unexpected death of a student or teacher. For Pilot Study 2, an abridged version of the crisis training curriculum manual was created to provide a 1-hour training

session for participants. An outline of the abridged version of the crisis training curriculum manual can be found in Appendix H.

Individuals who agreed to participate in Pilot Study 2 were given an informed consent (Appendix G) and a copy of the Education Rating Form (ERF) prior to the start of the training. Handouts were given to the participants to provide the exact content from the crisis training curriculum manual which was used in Pilot Study 2. Participants were asked to participate as if they were recipients of the training in the main studying, making notes on the ERF as necessary to address areas of the training in need of modification. The training lasted one hour, with didactic, role play, and experiential activities being integrated across the training session.

Following the training, mean scores were analyzed for Items 1 and 2 using SAS system for Windows. Information from the open-ended question regarding potential changes was assessed for common themes, with subsequent changes to the curriculum being made, as needed. An Excel spreadsheet was used to organize the data and record participants' suggestions for overall improvements.

Results

Ten ($n = 10$) master's- and doctoral-level counselors from a Midwestern university participated in Pilot Study 2. Of the participants, seven ($n = 7$) were master's-level counselors-in-training specializing in clinical mental health counseling and three ($n = 3$) were doctoral-level counselors-in-training. For the master's-level counselors-in-training, the mean number of hours completed in the program were 37.14 ($M = 37.14$, $SD = 16.85$) and the number of course hours completed for doctoral-level participants were 34.67 ($M = 34.67$, $SD = 22.03$).

Item 1 asked participants to rate the clarity of the content (i.e. presenter defining important terms, using appropriate language, helping with the ease of clarity of understanding content) using a 5-point Likert scale with a rating of 1 indicating "very unclear" clarity of content and a 5 indicating "very clear" clarity of content. Results indicated a mean rating of 4.9 (M = 4.9, SD = .32) on Item 1. Findings from this analysis support that the clarity of content presented to participants was acceptable and appropriate for use in the main study.

Item 2 asked participants to rate the learning modalities used in the presentation (i.e. visual, auditory, and kinesthetic/experiential) using a 5-point Likert scale with a rating of 1 indicating "very bad" use of learning modalities and a rating of 5 indicating "very good" use of learning modalities. Results indicate a mean rating of 4.8 (M = 4.8, SD = .42) on Item 2. Findings from this analysis indicate that the learning modalities used in the presentation were acceptable and appropriate for use in the main study.

Lastly, participants were asked to offer feedback regarding the overall presentation including suggestions for improvement. Themes from participant feedback included (a) benefit in role plays and experiential activities, (b) relevant content and information covered, (c) effective delivery of content, (d) need for additional time with role plays and experiential activities, and (e) benefit in supplemental handouts. Results from this section of the ERF suggest that the role plays and experiential learning activities (i.e. "Let's Check" activities) provided an added understanding of the material. Additionally, as these activities throughout the training were helpful in assisting in student learning, the participants recommended that more time be allotted for such activities. Participant feedback for the overall presentation is presented in Table 3.

Table 3

ERF General Comments for Pilot Study 2

Participant 1	During the suicide role playing, we really both [participants] need more time. Maybe 1.5 minutes or even 2.
Participant 2	I think this training would be very beneficial to school counselors because it is a very thorough program that teaches counselors specific skills they need in dealing with crisis management for student and teacher death. Good presentation! I really like the experiential activities.
Participant 3	Slides [for participants] might be helpful. For example, PowerPoint with note section in addition to extra handouts. Any more kinesthetic options or ways to integrate "hands on" stuff.
Participant 4	I love the "Let's Check" sections! Under "typical response" section, separate "…ion words" and "…ing words." Great plug-in of resource with Hospice Foundation. Plug in the resource on suicide with QPR. Another idea is to have a handout for these resources. Secure mental health services (sample side list—what it looks like). Great idea on the systemic effect of unexpected student death. You may want to use spacing on your PowerPoint more effectively. Using the whole area on a slide gives the listener more consistency. If you don't use the whole space, it keeps them thinking something else is coming.
Participant 5	Clear direction and strong execution of key points. Good balance of allowing participants to engage and give feedback. Always good to know mobile assessors of local agencies (many local mental health clinics have individuals who work directly with school counselors).
Participant 6	Felt comfortable with asking about suicide because of experience on suicide hotline. Excellent presentation! Clear. Concise.
Participant 7	Need more time for role plays. I think information/practice concerning interventions for trauma would be beneficial. Great job! Very clear and concise. You do a wonderful job listening, asking questions, and reflecting.
Participant 8	Allow more time for role plays. This is a great program. Nice job of answering questions! Very very good information.
Participant 9	I really like the learning checks throughout the program and the idea of role plays to practice skills. This seems like a really good way to apply the information and skills presented in the program. Practicing the crisis scripts as "coming out of your mouth" seems like a very valuable tool.
Participant 10	I really liked the "Let's Check" because it allows us to use our knowledge (the stuff we just learned) and put it to the test using example crisis situations. On the role-play Let's Check, please allow more time (it felt rushed). I learned a lot during this presentation in such a short time. I wish I could sit through the full presentation. The sample classroom announcement and crisis letter were very helpful to see how to word things.

Discussion for Pilot Study 2

The objective for Pilot Study 2: Crisis Training Feedback was to obtain comments and suggestions from master's- and doctoral-level counselors-in-training regarding the effectiveness of the crisis training proposed for the main study. Results from this pilot study indicate that both the content (mean score of 4.9 out of 5) and method of delivery (mean score of 4.8 out of 5) for the crisis training were appropriate for use in the main study as reported by participants. Qualitative data was further gathered to help identify what, if any, specific improvements could be made to enhance the overall training experience.

Based on the participants' qualitative feedback, adaptations to the content and methods of delivery were made to the final crisis training curriculum and training experience. Specific changes made to the curriculum and the training experience are detailed in the following list:

1. Addition of a mental health counseling resource information page to the crisis training curriculum (Participants 4 and 5).

2. Equal spacing included on the PowerPoint visual presentation of the crisis training curriculum (Participant 4).

3. Additional time offered during role plays (Participants 1, 7, 8, and 10).

After completing these changes to the curriculum, the crisis training manual was finalized for use in the main study.

Implementation of the Intervention

Based on participant feedback from Pilot Study 2: Crisis Training Feedback, the curriculum for the main study was formalized. As such, the implementation of the crisis

training intervention was executed in the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training.

Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training

The objective of the Main Study: Assessing the Effectiveness of School-Wide Crisis Management Training was to test research hypotheses 1 through 9. From Pilot Study 1: Crisis Training Needs Assessment, the crisis category of unexpected student and teacher death was identified as the crisis area most affecting students and most in need of additional master's-level training. In Pilot Study 2: Crisis Training Feedback, the crisis training curriculum manual for the main study was compiled and tested with a group of master's- and doctoral-level counselors-in-training not eligible to participate in the main study. Following Pilot Study 2, suggested changes were made to the curriculum and the research process began for the Main Study: Assessing the Effectives of a School-Wide Crisis Management Training. The main study sought to implement the crisis training to participating master's-level school counselor training institutions to assess the effectiveness of the intervention on school counselors-in-training sense of preparedness to intervene in a crisis incident.

Participants

Purposeful sampling was used to select both CACREP and non-CACREP accredited master's-level school counselor training programs in a two-state area within the Midwest. The perimeter for eligible counseling institutions to participate in the main study was defined based on the region surveyed for Pilot Study 1: Crisis Training Needs Assessment. School counseling practicum or internship instructors at master's-level

counseling institutions within this defined perimeter were contacted to participate. Five institutions were initially contacted regarding participation (n = 3 CACREP institutions; n = 2 non-CACREP institutions). Three institutions agreed to participate in the main study (n = 2 CACREP institutions; n = 1 non-CACREP institution). Within these participating institutions, all master's-level school counselors-in-training who were currently enrolled in a practicum or internship course were eligible to participate in the main study. Twenty-seven (n = 27) master's-level school counselors-in-training agreed to participate.

Instrument

Currently, no existing instrumentation has been identified that adequately addresses not only the types and frequencies of crises in the schools, but also formal and informal crisis intervention training, use of resources during crisis intervention, perceived adequacy of crisis intervention training and resources, and skills vital to effective crisis intervention training (Wachter, 2008). As such, the principal investigator developed the survey instrument entitled School Counselor-in-Training Crisis Preparedness (SCIT-CP) which was used in the main study.

The questions on the SCIT-CP instrument were developed to assess the participants' familiarity and understanding of trauma and crisis terms, suicide detection and intervention, and school-wide crisis management following an unexpected student or teacher death. Additionally, school counselors-in-training overall sense of preparedness to intervene in an unexpected death crisis incident was evaluated along with their current rating of the master's-level crisis training at their respective university.

The SCIT-CP includes 19 items, each rated on a 5-point Likert scale with a rating of 1 indicating "strongly disagree" to a rating of 5 indicating "strongly agree." The

reliability measure for the SCIT-CP indicated a Cronbach's alpha of .88 for the instrument, suggesting that the items have a relatively high level of internal consistency. A copy of the SCIT-CP assessment can be found in Appendix I. As all items are straight forward coding, higher scores on the SCIT-CP indicate higher feelings of sense of preparedness to intervene in an unexpected student and teacher death crisis incident.

Procedure

CACREP and non-CACREP accredited master's-level school counselor training programs within a two-state area were contacted regarding participation in the current study. A perimeter area for the intervention was set through Pilot Study 1: Crisis Training Needs Assessment, as the participants in this area defined the crisis training need for the specified region. As such, only CACREP and non-CACREP counseling programs located within this region were eligible to participate in the main study.

Once master's-level counseling programs were identified as eligible for participation, the practicum or internship-level instructor for school counselors were contacted regarding the purpose of the study. Contact information for instructors was obtained via the departmental webpage or campus directory. A copy of the initial email contact to instructors can be found in Appendix J. After initially emailing the instructors, the principal investigator waited approximately two weeks before calling non-respondent programs. Once instructors agreed to participate in the study, an email list was obtained for students planning to enroll or who were currently enrolled in a practicum or internship course in the Fall 2010 semester at each institution. Instructor information along with student names and email addresses were typed into an Excel spreadsheet and separated by participating institution for future use.

The week prior to the semester starting, participating practicum and internship instructors were sent an email regarding the timeline for the study across the semester. Additionally, they were informed that an electronic link to the SCIT-CP would be attached in an email during the following week. A copy of the email to instructors can be found in Appendix K.

During the first week of the semester, participating practicum and internship instructors were sent the electronic link to the SCIT-CP. Instructors were directed to forward the electronic link to all students in their practicum and/or internship class during the first week of class to gather Time 1 data. Included in the electronic link was a demographic form (Appendix L) and letter of informed consent (Appendix M). Student participants were asked to complete the SCIT-CP electronically within the first week of classes. Participants were also asked to create an identification code using the first 3 letters of their last name and last 3 digits of their social security number. The identification code was used to link participant data from Time 1 through Time 4. Survey software from counselingtechnology.net was used to store collected data from the SCIT-CP in a password protected document. Approximately two weeks after disseminating the email link to participating students, the online file containing the SCIT-CP pre-test survey data was downloaded and saved on a password protected computer in a locked office.

Starting at the beginning of October, the principal investigator traveled to each participating university to complete the intervention. Prior to beginning the intervention, participating students were asked complete the first SCIT-CP instrument (Time 2 data).

Participants were asked to use the same identification code from Time 1 to link their Time 2 data.

Next, the principal investigator conducted the unexpected student and teacher death crisis training intervention. The intervention followed the crisis training curriculum manual developed from Pilot Study 2: Crisis Training Feedback and lasted 2 1/2 hours. Each participant was given a copy of the training manual at the start of the crisis training. An outlined copy of the crisis and trauma training manual can be found in Appendix N.

Immediately following the training, participants were asked to complete the SCIT-CP instrument to assess for initial impacts of the crisis training on sense of preparedness (Time 3 data). Participants were instructed to, again, use the same identification code from Time 1 and Time 2 data collection to link their Time 3 data. Participants were informed that in approximately one month (near the end of the semester), they would receive an email from their course instructor with an electronic link to the SCIT-CP in order to collect Time 4 data.

Approximately one month following the intervention, participating practicum and internship instructors were emailed an electronic link to the SCIT-CP instrument and were asked to forward the link to students in their practicum and internship classes. Students were asked to complete the final SCIT-CP instrument using their same identification code. Survey software from counselingtechnology.net was used to store collected data from the SCIT-CP post-test in a password protected document. Approximately two weeks after disseminating the email link to participating students, the online file containing the SCIT-CP post-test instrument data was downloaded and saved

on a password protected computer in a locked office. Data collection times and methods

are illustrated in Table 4.

Table 4

Survey Administration Time and Methods

Assessment Period	Time Frame	Administered by	Administration means
Pre-Test 1 (Time 1)	Week 1 of the school semester	Link sent via course instructor	Electronic link to survey
Post-Test 1 (Time 2)	Mid-semester	Principal Investigator	Paper/pencil survey
Post-Test 2 (Time 3)	Mid-Semester, immediately following intervention	Principal Investigator	Paper/pencil survey
Post-Test 3 (Time 4)	One month after intervention	Link sent via course instructor	Electronic link to survey

Data Analysis

Data from the SCIT-CP were entered into the SAS system for Windows for

analysis. Inferential and descriptive statistics were used in data analysis. The following

list outlines the statistical methods employed for each research question:

1. Descriptive statistics described the demographic data of participants.

2. For Hypothesis 1: The mean total score for Items 1 through 17 on the

   SCIT-CP was used to assess the initial reported levels of preparedness for

   an unexpected student or teacher death crisis incident. Data from the Time

   1 data collection point for all participants (CACREP and non-CACREP)

   was included in this initial analysis.

3. For Hypothesis 2: An independent sample *t* test comparison of mean total

   score for Items 1 through 17 on the SCIT-CP was used to compare initial

reported levels of preparedness in crisis and trauma intervention for school counselors-in-training in CACREP and non-CACREP programs.

4. For Hypothesis 3: A one-way, within-group, analysis of variance (ANOVA) was used to assess the before and after impact of the crisis and trauma training for all participants in both CACREP and non-CACREP programs. Data were used from Time 1, Time 2, and Time 3 data collection points.

5. For Hypothesis 4: A 2 x 3, one between-group, one within-group, factorial ANOVA was used to assess whether CACREP and non-CACREP school counselors-in-training differ on their sense of preparedness for crisis intervention following the crisis and trauma training. Data gathered from Time 1, Time 2, and Time 3 were used in the analysis.

6. For Hypothesis 5: A paired sample *t* test was used to assess if school counselors-in-training experience a different sense of preparedness one-month following the crisis and trauma training. Data collected from Time 3 and Time 4 were used for all CACREP and non-CACREP participants in this analysis.

7. For Hypothesis 6: A 2 x 2, one between-group, one within-group, factorial ANOVA was used to assess whether CACREP and on-CACREP students differ in their sense of preparedness approximately one month following the crisis and trauma training. Data collected from Time 3 and Time 4 were used for a CACREP versus non-CACREP participant comparison in this analysis.

8. For Hypothesis 7: A mean score and standard deviation was used to report how school counselors-in-training regard their master's-level training for crisis and trauma detection and intervention. Data from all CACREP and non-CACREP participants was included in this analysis from the Time 1 data collection point.

9. For Hypothesis 8: An independent sample t test was used to assess the potential differences in how CACREP and non-CACREP school counselors-in-training regard their masters level training for crisis and trauma intervention. Data collected from the Time 1 data collection point were used in this analysis.

10. For Hypothesis 9: A mean score and standard deviation was used to report if school counselors-in-training believe crisis training is necessary for school counselors-in-training. Data from all CACREP and non-CACREP participants was included in this analysis from the Time 1 data collection point.

Results from these data analyses will be reported in Chapter IV.

CHAPTER FOUR: RESULTS

The current study sought to assess school counselors-in-training sense of preparedness to detect and intervene in an unexpected student and teacher death crisis incident. To examine this research inquiry, data were collected and four time points and analyzed. This chapter will report results obtained from the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training, beginning with demographic information of the participants. Next, results will be presented for each research hypothesis.

Demographics

A descriptive analysis of general demographic characteristics was conducted. The main study began with 27 initial participants completing the SCIT-CP at the Time 1 data collection point. Of these participants, 33.3% (n = 9) were master's-level school counselors-in-training attending a CACREP accredited university while 66.7% (n = 18) were master's-level school counselors-in-training attending a non-CACREP accredited university.

Of the 9 CACREP participants, 22.2% (n = 2) were enrolled in an elementary practicum or internship course, 11.1% (n = 1) was enrolled in a middle school practicum or internship course, 11.1% (n = 1) was enrolled in a high school practicum or internship course, 44.4% (n = 4) were enrolled in a combined practicum or internship course (elementary and middle school, middle or high school, or K-12 practicum or internship course) and 11.1% (n = 1) did not report his or her practicum or internship enrollment. Additionally, 55.6% of the CACREP participants (n =5) reported completing zero (0) master's level courses in crisis counseling while 44.4% (n = 4) reported completing more

than two (2+) master's-level courses in crisis counseling. When asked how many in-service or professional development opportunities for crisis counseling the participants had received, 66.7% of CACREP participants (n = 6) reported receiving zero (0) additional trainings, 22.2% (n = 2) reported receiving one (1) in-service training, and 11.1% (n = 1) reported receiving more than two (2+) in-service trainings. When assessing race and ethnicity, 66.7% of CACREP participants (n = 6) reported Caucasian status and 33.3% (n = 3) reported African American status. Lastly, 22.2% of CACREP participants (n = 2) were male and 77.8% (n = 7) were female.

Of the18 non-CACREP participants, 11.1% (n = 2) were enrolled in an elementary practicum or internship course, 11.1% (n = 2) were enrolled in a middle school practicum or internship course, 27.8% (n = 5) were enrolled in a high school practicum or internship course, and 50% (n = 9) were enrolled in a combined practicum or internship course (elementary and middle school, middle or high school, or K-12 practicum or internship course). Additionally, 61.1% of the non-CACREP participants (n =11) reported completing zero (0) master's level courses in crisis counseling, 27.8% (n = 5) reported completing one (1) course, and 11.1% (n = 2) reported completing more than two (2+) master's-level courses in crisis counseling. When asked how many in-service or professional development opportunities for crisis counseling the participants had received, 33.3% of non-CACREP participants (n = 6) reported receiving zero (0) additional trainings, 38.9% (n = 7) reported receiving one (1) in-service training, 16.7% (n = 3) reported receiving two (2) in-service trainings, and 11.1% (n = 2) reported receiving more than two (2+) in-service trainings regarding crisis counseling. When assessing race and ethnicity, 94.4% of non-CACREP participants (n = 17) reported

Caucasian status and 5.6% (*n* = 1) reported African American status. Lastly, 22.2% of

the non-CACREP participants (*n* = 4) were male and 77.8% (*n* =14) were female.

Demographic information for all CACREP and non-CACREP participants is reported in

Table 5.

Table 5

Main Study Participant Demographics

Characteristic	CACREP		Non-CACREP		Total	
	%	*n*	%	*n*	%	*n*
Program						
Elementary School	22.2	2	11.1	2	15.4	4
Middle School	11.1	1	11.1	2	11.5	3
High School	11.1	1	27.8	5	23.1	6
K-12	44.4	4	50.0	9	50.0	13
Crisis Courses Completed						
Zero (0)	55.6	5	61.1	11	61.5	16
One (1)	0.0	0	27.8	5	18.5	5
Two (2)	0.0	0	0.0	0	0.0	0
More than 2 (2+)	44.4	4	11.1	2	22.2	6
Crisis In-Services Completed						
Zero (0)	66.7	6	33.3	6	44.4	12
One (1)	22.2	2	38.9	7	33.3	9
Two (2)	0.0	0	16.7	3	11.1	3
More than 2 (2+)	11.1	1	11.1	2	11.1	3
Race/Ethnicity						
Caucasian	66.7	6	94.4	17	85.2	23
African American	33.3	3	5.6	1	14.8	4
Sex						
Male	22.2	2	22.2	4	22.2	6
Female	77.8	7	77.78	14	77.8	21

Analysis of Research Hypotheses

Research Hypothesis 1

Master's-level school counselors-in-training will report their initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident as below prepared (score of 59.5 or lower on the SCIT-CP total score).

The total score for Questions 1 through 17 on the SCIT-CP was used to compare all CACREP and non-CACREP participants on initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident. Questions 1 through 17 asked participants to rate their knowledge and level of preparedness on a variety of terms and situations that may occur within such crisis scenarios. The total score on the items 1 through 17 is subsequently referred to as the SCIT-CP score. The total score possible on the SCIT-CP is 85 with higher SCIT-CP scores representing a greater overall sense of preparedness to intervene in an unexpected student or teacher death crisis incident. For Research Hypothesis 1, a cut-off score of 59.5 was used to determine a "below prepared" sense of preparedness for participants. The cut-off score was derived from calculating a rating of 3.5 (on a 5 point scale) on each of the 17 items (to equal 59.5 on the SCIT-CP). Data used to answer Research Hypothesis 1 were gathered from all participants at the Time 1 data collection point.

Results from this analysis indicate that master's-level school counselors-in-training do not feel initially prepared to intervene in an unexpected student or teacher death crisis incident, as evidenced by a mean SCIT-CP score for all CACREP and non-CACREP participants at Time 1 as a 51.89 (*SD* = 9.52). Based on the language of the 5-point SCIT-CP with a 1 rating representing "strongly disagree" and a 5 rating

representing "strongly agree", a mean score of 51.89 would indicate that an average rating for participants would be "undecided" (a rating of 3 out of 5) for the 17 items. An itemized account of mean responses for all participants for each SCIT-CP item can be found in Table 6.

To further support these findings, the mean and standard deviation for Question 17 on the SCIT-CP was calculated. Item 17 asked all CACREP and non-CACREP participants to respond directly to the statement "I feel prepared to intervene in an unexpected student or teacher death crisis incident." Time 1 pre-test data were used to answer this research hypothesis. A 5-point Likert scale was used to assess the response with 1 indicating "strongly disagree" and 5 indicating "strongly agree." Results from the analysis further indicate the master's-level school counselors-in-training do not feel initially prepared to intervene in an unexpected student and teacher death crisis incident as reported by an overall mean score of 2.89 (SD = 1.09) on a 5-point scale for Item 17.

As the Research Hypothesis 1 stated that master's-level school counselors-in-training would initially feel unprepared to intervene in an unexpected student or teacher death crisis incident as represented by an initial score of 59. 5 or lower on the SCIT-CP, Research Hypothesis 1 was supported.

Table 6

Descriptive statistics per SCIT-CP item for all participants at Time 1

Item	CACREP			Non-CACREP			Total		
	N	M	SD	N	M	SD	N	M	SD
Item 1: I understand the difference between the terms "trauma" and "crisis."	9	3.22	0.97	18	4.00	0.65	27	3.74	0.81
Item 2: I understand the trilogy definition of crisis.	9	2.33	0.50	18	2.50	0.99	27	2.44	0.85
Item 3: I understand age-appropriate responses by children and adolescents following an unexpected student or teacher death crisis incident.	9	3.00	1.12	18	3.72	0.67	27	3.48	0.89

Table 6 continued: Item	CACREP			Non-CACREP			Total		
	N	M	SD	N	M	SD	N	M	SD
Item 4: I feel prepared to assess age-appropriate responses by children and adolescents following an unexpected student or teacher death.	9	2.22	0.83	18	3.00	0.91	27	2.74	0.94
Item 5: I understand what classifies a traumatic response as "extreme" or a "warning sign" for childhood adjustment.	9	3.44	0.88	18	2.89	1.13	27	3.07	1.07
Item 6: I understand the characteristics that would classify a student as "at-risk" for suicide.	9	3.22	0.83	18	4.06	0.73	27	3.78	0.85
Item 7: I feel prepared to detect suicide warning signs in students.	9	3.00	0.87	18	3.94	0.42	27	3.63	0.74
Item 8: I understand the levels of suicide risk and lethality.	9	2.33	1.22	18	3.78	0.88	27	3.30	1.2
Item 9: I feel prepared to assess suicide risk or level of lethality in students.	9	2.56	0.88	18	3.28	0.96	27	3.04	0.98
Item 10: I feel prepared to intervene with students who are identified as at-risk for suicide.	9	2.67	0.71	18	3.56	0.86	27	3.26	0.9
Item 11: I understand the term "contagion."	9	2.00	0.50	18	2.83	1.20	27	2.56	1.09
Item 12: I feel prepared to detect contagion situations.	9	2.00	0.50	18	2.50	0.92	27	2.33	0.83
Item 13: I understand what classifies a person as "high risk" following an unexpected student or teacher death crisis incident.	9	2.44	0.73	18	3.22	1.06	27	2.96	1.02
Item 14: I understand the steps to addressing school-wide management in the immediate day(s) following an unexpected student or teacher death.	9	2.00	0.87	18	3.06	1.11	27	2.70	1.14
Item 15: I feel prepared to serve as a member of a crisis management team within a school setting.	9	2.44	0.53	18	3.06	1.11	27	2.85	0.99
Item 16: I am familiar with resources to help me manage unexpected student or teacher death crisis incidents.	9	2.44	1.01	18	3.44	0.98	27	3.11	1.09
Item 17: I feel prepared to intervene in an unexpected student or teacher death crisis incident.	9	2.22	0.67	18	3.22	1.11	27	2.89	1.09
*Item 18: I believe that crisis training for master's-level school counselors-in-training is essential to appropriate counselor training.	9	4.33	1.32	18	4.89	0.32	27	4.70	0.82
*Item 19: I would rate my master's-level training concerning crisis and trauma detection and intervention as _____.	9	2.33	0.71	18	2.72	1.07	27	2.59	0.97

* Indicates item which is *not* calculated into overall SCIT-CP score.

Research Hypothesis 2

CACREP students will report higher levels of initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident than will non-CACREP students.

As with Research Hypothesis 1, the SCIT-CP score (Items 1 through 17 on the SCIT-CP) was used to compare CACREP and non-CACREP participants on initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident. Data used to answer Research Hypothesis 2 were gathered from all participants at the Time 1 data collection point.

To begin this analysis, Levene's Test for Equality of Error Variances was conducted to see if the homogeneity of variance assumption was met or unmet. Results indicated that the CACREP and non-CACREP samples did not violate the assumption that error variances would be equal across the groups, $F(1, 25) = 2.10, p = .16$. As the homogeneity of variance assumption was not violated, an independent sample t test was used to assess the possible differences in initial levels of preparedness to intervene in an unexpected student and teacher death crisis incident between the groups.

From the independent sample t test, results indicated that CACREP and non-CACREP students reported a statistically significant difference on initial levels of preparedness as assessed by the comparison of mean SCIT-CP scores, $t(25) = -4.06, p < .001$. While differences existed between the groups, the trend in differences was contradictory to Research Hypothesis 2. The mean SCIT-CP scores and standard deviations for CACREP and non-CACREP participants was reported as 43.56 (*SD* = 6.09) and 56.06 (*SD* = 8.13), respectively.

To further investigate this hypothesis, mean scores and standard deviations for Item 17 were calculated for the CACREP and non-CACREP groups separately. As Item 17 directly asked participants to rate their sense of preparedness to intervene in an unexpected student and teacher death crisis incident, the mean scores may offer a more precise look into the participants' self-reported level of preparedness. The mean scores and standard deviations for each group on Item 17 show that CACREP participants reported a mean rating of 2.22 (*SD* = .67) on a 5-point scale whereas non-CACREP participants reported a mean rating of 3.22 (*SD* = 1.11) on this item. As Research Hypothesis 2 projected that CACREP students would report higher levels of initial feelings of preparedness to intervene in an unexpected student and teacher death crisis incident than would non-CACREP students, Research Hypothesis 2 was refuted. Results from Research Hypothesis 2 are displayed in Table 7.

Table 7

Group Comparison of SCIT-CP and Item 17 Scores

Group	N	SCIT-CP Mean (SD)	Item 17 Mean (SD)
CACREP	9	43.56 (6.09)	2.22 (0.67)
Non-CACREP	18	56.06 (8.13)	3.22 (1.11)
Total	27	51.89 (9.52)	2.89 (1.09)

Note. Significant difference between groups, $t(25) = -4.06, p < .001$.

Research Hypothesis 3

School counselors-in-training will report a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training.

A one-way, within-group, repeated measures analysis of variance (ANOVA) was used to compare all CACREP and non-CACREP students' sense of preparedness to

intervene in an unexpected student and teacher death crisis incident before and after the crisis and trauma training. The comparison was conducted using the mean SCIT-CP score for all participants at Time 1, Time 2, and Time 3 data collection points. Three participants were not present at the time of the Main Study intervention, and as such, did not complete the Time 2 and Time 3 post-test. For Hypothesis 3, 24 participants were included in the analysis with 9 participants representing the CACREP group (37.5%) and 15 participants representing the non-CACREP group (62.5%).

To begin this analysis, Mauchly's Test of Sphericity was conducted to assess the equality of variances assumption for the within-group, repeated measures variable. Results indicated that the within-group time variable did violate the assumption for equality of variances, $\chi^2(2) = 8.03$, $p = .018$, therefore the degrees of freedom were corrected using the Greenhouse-Geisser estimates of sphericity ($\varepsilon = .78$). Following the correction, results indicated that participants' level of preparedness were statistically significantly different over time, $F(1.53, 46) = 156.72$, $p < .001$, partial $\eta^2 = .87$.

Next, a follow-up test was conducted to evaluate pairwise differences using a Bonferroni correction for the SCIT-CP means across the three data collection time points. The pairwise post-hoc comparison of the three time points indicated that participants reported statistically significantly higher mean SCIT-CP scores at the Time 3 post-test following the crisis and trauma training ($M = 74.38$, 95% CI [71.13, 77.6]) than at the Time 1 pre-test ($M = 50.58$, 95% CI [46.68, 54.48]) and the Time 2 post-test ($M = 47.75$, 95% CI [43.62, 51.88]). Results reflected a statistically significant difference between Time 1 and Time 3 data collection time points ($p < .001$) and between Time 2 and Time 3

data collection time points ($p < .001$). A statistically significant difference was not

evidenced between the Time 1 and Time 2 data collection time point ($p = .055$).

The results of the one-way, within-group, repeated measures ANOVA support the

hypothesis that school counselors-in-training would report a greater sense of

preparedness to intervene in an unexpected student and teacher death crisis situation

following the crisis and trauma training. Descriptive statistics and confidence intervals

are displayed in Table 8 with pairwise comparisons displayed in Table 9. The reported

levels of preparedness over Time 1, Time 2, and Time 3 data collection points are

illustrated in Figure 1.

Table 8

Descriptive Statistics and Confidence Intervals for Time 1, Time 2, and Time 3

	N	Mean	SD	Std. Error	95% Confidence Interval for Means	
					Lower Bound	Upper Bound
Time 1	24	50.58	9.24	1.89	46.68	54.48
Time 2	24	47.75	9.79	2.00	43.62	51.88
Time 3	24	74.38	7.69	1.57	71.13	77.62

Table 9

Pairwise Comparisons of Data Collection Time Points

(i) Time	(j) Time	Mean difference (i-j)	Std. Error	Significance
1	2	2.83	1.12	.055
	3	**-23.79***	1.8	< .001
2	1	-2.83	1.12	.055
	3	**-26.63***	1.93	< .001
3	1	**23.79***	1.8	< .001
	2	**26.63***	1.93	< .001

* Mean difference is significant with Bonferroni correction

Figure 1. Mean SCIT-CP Scores for All Participants Across Time Points
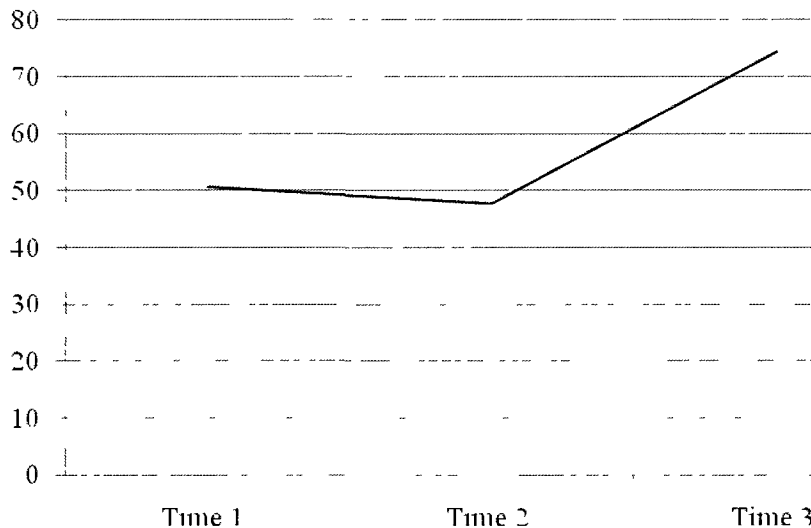
Figure 1. The line represents the mean SCIT-CP scores for all participants (CACREP and non-CACREP) at the Time 1 pre-test, Time 2 post-test, and Time 3 post-test following the crisis and trauma training.

Research Hypothesis 4

CACREP and non-CACREP students will not demonstrate a significant difference

on sense of preparedness following crisis and trauma training.

A 2 x 3, one between-group, one within-group, factorial analysis of variance (ANOVA) was used to compare CACREP and non-CACREP participants on feelings of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training. To answer the research hypothesis, SCIT-CP scores were obtained and compared for CACREP versus non-CACREP participants at Time 1, Time 2, and Time 3 data collection points.

To begin this analysis, two tests were needed to assure that the data were not violating the ANOVA assumptions for both between-group and within-group equality of variances. Levene's Test for Equality of Error Variances was conducted to see if the error

variances of the SCIT-CP scores were equal across both groups. Results indicated that the assumption was met for the CACREP and non-CACREP groups at all three time points, $F(1, 22) = 1.90, p = .182, F(1, 22) = 2.78, p = .110$, and $F(1, 22) = .004, p = .948$, for Time 1, Time 2, and Time 3 data collection points, respectively. Next, Mauchly's Test of Sphericity was conducted to assess the equality of variances assumption for the groups in the repeated measures variable. Results indicated that the CACREP and non-CACREP samples did not violate the assumption for equality of variances, $\chi^2(2) = 5.90, p = .052$. As neither assumption tests was violated, the 2 x 3 factorial ANOVA was used to assess the possible differences in levels of preparedness over time to intervene in an unexpected student and teacher death crisis incident between the CACREP and non-CACREP groups.

Beyond the model assumptions, the next analysis sought to investigate if a possible interaction existed between the within-group (time) and between-group (CACREP or non-CACREP school) variables. Results showed that an interaction between these variables was not evidenced, $F(2, 21) = 113.27, p = .10$. Next, main effect analyses were conducted to assess if differences were found for the within-group and between-group variables independently. Results indicated that there was a significant main effect for the CACREP versus non-CACREP between-group variable, $F(1, 22) = 16.12, p < .001$. Additionally, a significant main effect existed for the time variable, $F(1, 22) = 188.74, p < .001$.

As the between-group variable only had two levels (CACREP versus non-CACREP), no follow-up test was necessary. However, to further explain the trend in results, an analysis of the mean SCIT-CP over all three data collection time points was

conducted. Results indicated that non-CACREP students demonstrated a statistically significantly higher sense of preparedness than did the CACREP students, as evidenced by mean scores of 51.30 and 61.33 for CACREP and non-CACREP students, respectively. The difference was found to be significant at an alpha level of $p = .001$. Such findings suggest that non-CACREP students report a higher sense of preparedness to intervene in an unexpected student and teacher death crisis incident than did the CACREP students across the three time points.

The within-group variable had three levels (Time 1, Time 2, and Time 3), and as such, a follow-up test was necessary. As with Research Hypothesis 3, the Bonferroni correction for the alpha level was used to prevent an inflated significance in the pairwise comparisons between the three levels. For this comparison, participants reported statistically significantly higher mean SCIT-CP scores at the Time 3 post-test following the crisis and trauma training ($M = 73.72$, 95% CI [70.49, 76.96]) than at the Time 1 pre-test ($M = 49.18$, 95% CI [45.88, 52.47]) and the Time 2 post-test ($M = 46.04$, 95% CI [42.87, 49.22]). The Time 1 versus Time 2 comparison was significant at $p = .037$, while the Time 2 versus Time 3 and the Time 1 versus Time 3 pairwise comparisons were significant at $p < .001$.

Overall findings from this analysis support the hypothesis that CACREP and non-CACREP students would demonstrate a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training, with no interaction of the grouping variable (CACREP versus non-CACREP) being present. As Research Hypothesis 4 predicted that CACREP and non-CACREP students would not differ on sense of preparedness following the crisis and trauma

training, this hypothesis is refuted. An illustration of the between-group and within-group

variables is displayed in Figure 2.

Figure 2. Group and Time Differences for Mean SCIT-CP Scores
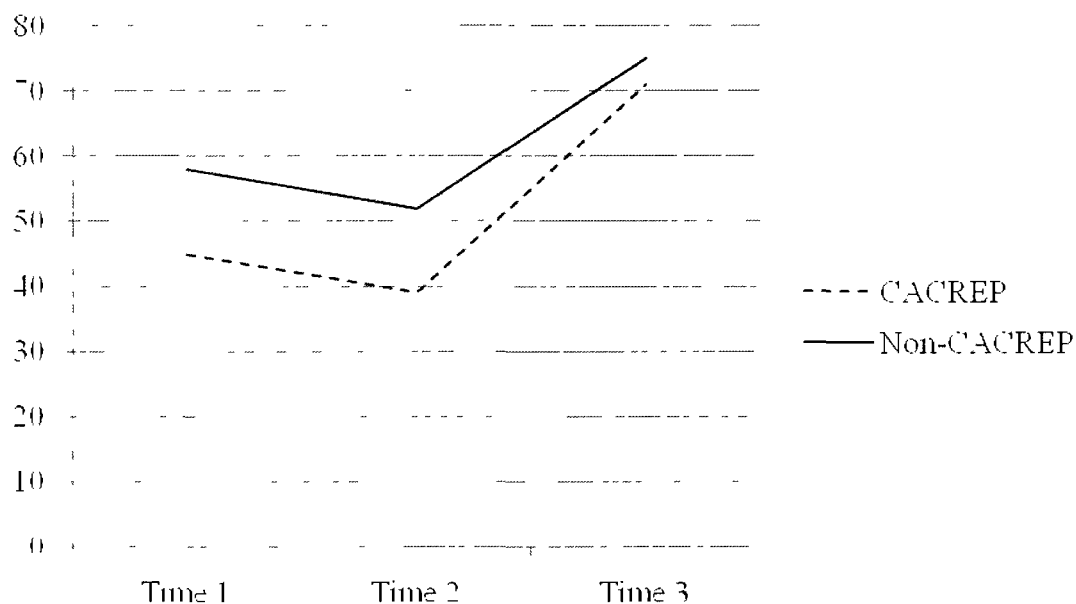
Figure 2. The dashed line represents CACREP students mean SCIT-CP scores across Time 1 pre-test, Time 2 post-test, and Time 3 post-test following the crisis and trauma training. The solid line represents the same data collection information for the non-CACREP group.

Research Hypothesis 5

School counselors-in-training will report a different sense of preparedness one month following crisis and trauma training.

A paired sample *t* test was used to assess all CACREP and non-CACREP

participants' sense of preparedness to intervene in an unexpected student and teacher

death crisis incident one month following the crisis and trauma training. To answer the

research hypothesis, mean SCIT-CP scores were used for all CACREP and non-CACREP

participants from Time 3 and Time 4 data collection time points. Due to attrition,

Research 5 included data from 14 participants, with 6 participants representing the

CACREP group (42.9%) and 8 participants representing the non-CACREP group (57.1%). Results from the paired sample *t* test indicated that the participants reported a statistically significantly lower sense of preparedness to intervene in a crisis incident one month following the crisis and trauma training, $t(13) = 3.78, p = .002$. Specifically, the overall mean SCIT-CP score for all participants at the Time 3 data collection point was 73.07 ($SD = 7.68$) with the maximum SCIT-CP being a score of 85. By the Time 4 data collection point, approximately one month later, participants had self-reported a significantly different sense of preparedness, as reflected by an overall mean SCIT-CP score of 67.29 ($SD = 6.22$). Based on the findings that participants would report a different sense of preparedness at the one-month follow up, Research Hypothesis 5 was deemed tenable.

Research Hypothesis 6

CACREP and non-CACREP students will not demonstrate a significant difference on sense of preparedness one month following crisis and trauma training.

A 2 x 2, one between-group, one within-group, factorial analysis of variance (ANOVA) was used to compare CACREP and non-CACREP participants on sense of preparedness to intervene in an unexpected student and teacher death crisis incident one month following the crisis and trauma training. To answer the research hypothesis, mean SCIT-CP overall scores were compared for CACREP versus non-CACREP participants at Time 3 and Time 4 data collection points. As with Research Hypothesis 5, data was only used from the 14 participants who completed both the Time 3 and Time 4 post-test.

To test the between-group model assumption, Levene's Test for Equality of Error Variances was conducted. Results indicate that error variance was equal across groups at

Time 3 [$F(1, 12) = .008, p = .928$] and at Time 4 [$F(1,12) = .001, p = .970$] data

collection time points. As the within-group variable only contained two levels (Time 3

and Time 4), the Mauchly's Test of Sphericity for the CACREP and non-CACREP

participants was not needed.

As violations did not exist for the model assumptions, the 2 x 2 factorial ANOVA

was then conducted to assess CACREP and non-CACREP differences at Time 3 and

Time 4 data collection points. The preliminary analysis sought to investigate if a possible

interaction existed between the within-group (time) and between-group (CACREP or

non-CACREP school) variables. No interaction effect was found for the time and school

grouping variables, $F(1,12) = .004, p = .949$. Next, main effect analyses were conducted

to see if differences existed for the within-group and between-group variables separately.

Results indicated that there was not a significant main effect for the CACREP versus

non-CACREP between-group variable, $F(1, 12) = 3.43, p = .089$. However, a significant

main effect did exist for the time variable, $F(1, 12) = 12.86, p = .004$. The trends between

groups across Time 3 and Time 4 data collection points are illustrated in Figure 3. Results

from this analysis confirm that differences were evidenced across the three data

collection time points, however the groups did not significantly vary over time. As

Research Hypothesis 6 posited that the CACREP and non-CACREP groups would not

vary significantly one month following the crisis and trauma training, Research

Hypothesis 6 was supported.

Figure 3. Group and Time Differences for Follow-Up
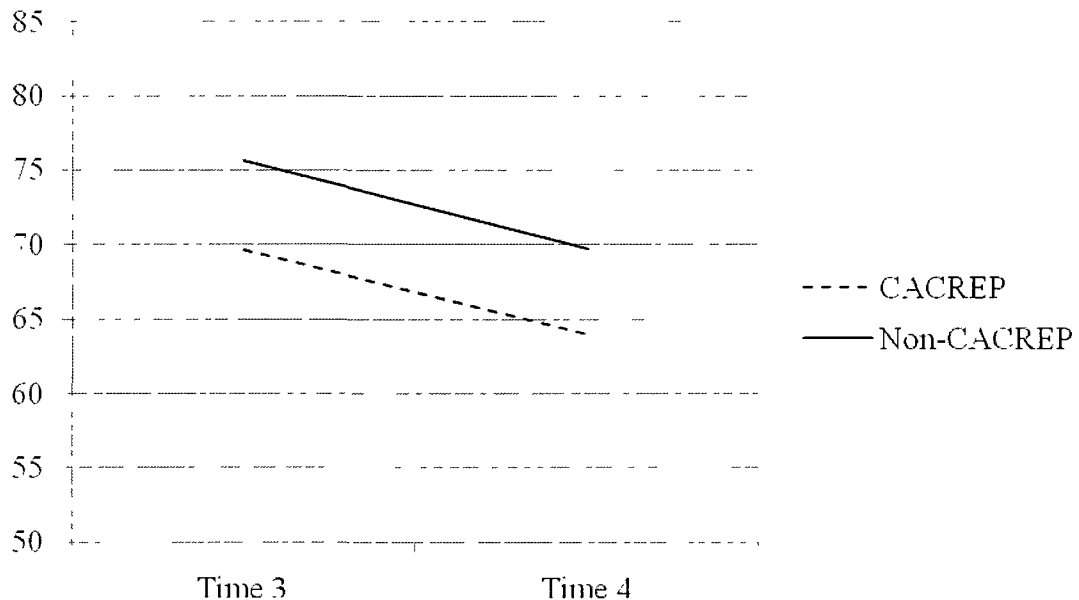
Figure 3. The dashed line illustrates the CACREP students mean SCIT-CP scores across Time 3 post-test and Time 4 post-test, with both post-tests following the crisis and trauma training. The solid line represents the same data collection information for the non-CACREP group.

While no research hypothesis directly investigated whether CACREP and non-CACREP groups differed across all four time points, a final analysis was conducted to view such trends in the data. The 14 participants who completed the SCIT-CP at all four data collection time points were included in this analysis. To research the trends, a 2 x 4, one between-group, one within-group, factorial ANOVA was conducted. Levene's Test for Equality of Error Variances was first run to assess if model violations were present for the between-group variable. Results indicated that the homogeniety of variance assumption was not violated for the groups at Time 1 [$F(1, 12) = .413, p = .533$], Time 2 [$F(1, 12) = 2.22, p = .162$], Time 3 [$F(1, 12) = .008, p = .928$], or Time 4 [$F(1, 12) = .001, p = .970$] data collection points. Next, Mauchly's Test of Sphericity was run to test

the within-group model assumption of equality of variances. Results indicated that the within-group time variable did not violate the assumption, $\chi^2(5) = 6.24, p = .286$.

Following the tests for model assumptions, the 2 x 4 ANOVA was then conducted to assess possible CACREP and non-CACREP differences in sense of preparedness to intervene in an unexpected student and teacher death crisis incident across the four data collection time points. The first analysis sought to investigate if a possible interaction existed between the within-group (time) and between-group (CACREP or non-CACREP school) variables. No interaction effect was found for the time and school grouping variable, $F(3, 10) = .978, p = .972$. Next, main effect analyses were then conducted to see if differences existed for the between-group and within-group variables independently. Results indicated that there was a significant main effect for the CACREP versus non-CACREP school group variable, $F(1, 12) = 5.59, p = .036$. Additionally, a significant main effect existed for the time variable, $F(3, 10) = 49.11, p < .001$.

As the between-group variable only had two levels (CACREP versus non-CACREP), no follow-up test was necessary. However, to further explain the trend in results, an analysis of the mean SCIT-CP over all four data collection time points was conducted. Results indicated that non-CACREP students demonstrated a statistically significantly higher sense of preparedness than did the CACREP students, as evidenced by mean scores of 54.96 and 61.56 for CACREP and non-CACREP students, respectively. Such findings suggest that non-CACREP students report a higher sense of preparedness to intervene in an unexpected student and teacher death crisis incident than did the CACREP students across the four time points.

The within-group variable had four levels (Time 1, Time 2, Time 3, Time 4), and as such, a follow-up test was necessary. The Bonferroni correction was used to prevent an inflated significance in the alpha level for the pairwise comparisons. In this post-hoc analysis, all pairwise comparisons for the four time points were found to be significant except for the Time 1 versus Time 2 comparison, with a reported alpha level for this comparison being $p = .104$. One comparison worth noting is the Time 3 mean SCIT-CP scores versus mean scores reported at Time 1, Time 2, and Time 4 for all participants. For this comparison, participants reported statistically significantly higher mean SCIT-CP scores at the Time 3 post-test following the crisis and trauma training ($M = 72.65$, 95% CI [68.33, 76.96]) than at the Time 1 pre-test ($M = 48.52$, 95% CI [44.18, 52.86]), Time 2 post-test ($M = 45.00$, 95% CI [41.20, 48.80]), and at the Time 4 post-test ($M = 66.88$, 95% CI [63.52, 70.23]). The Time 3 versus Time 1 and Time 2 pairwise comparisons were found to be significant at the $p < .001$ level, while the Time 3 versus Time 4 pairwise comparison was found to be significant at the $p = .022$ level. Additionally, participants reported statistically significantly higher mean SCIT-CP at Time 4 than at Time 1, Time 2, and Time 3 with the Time 1 and Time 2 comparisons being significant at the $p < .001$ level. Descriptive statistics and confidence intervals are displayed in Table 10 with pairwise comparisons displayed in Table 11. An illustration of the mean SCIT-CP scores for all CACREP and non-CACREP participants across all four data collection time points can be found in Figure 4.

Overall findings from this additional analysis support CACREP and non-CACREP students demonstrated a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma

training, with their greatest levels of preparedness being reported at the Time 3 data

collection point. Additionally, non-CACREP participants reported a greater overall sense

of preparedness across the time points than did the CACREP participants.

Table 10

Descriptive Statistics and Confidence Intervals for the Data Collection Time Points

	N	Mean	SD	Std. Error	95% Confidence Interval for Means	
					Lower Bound	Upper Bound
Time 1	14	49.07	8.11	1.99	44.18	52.86
Time 2	14	45.50	7.18	1.75	41.20	48.80
Time 3	14	73.07	7.68	1.98	68.33	76.96
Time 4	14	67.29	6.22	1.54	63.52	70.23

Table 11

Pairwise Comparisons of Data Collection Time Points

(i) Time	(j) Time	Mean difference (i-j)	Std. Error	Significance
1	2	3.52	1.28	.104
	3	**-24.13***	1.96	< .001
	4	**-18.35***	2.13	< .001
2	1	-3.52	1.28	.104
	3	**-27.65***	2.15	< .001
	4	**-21.88***	2.19	< .001
3	1	**24.13***	1.96	< .001
	2	**27.65***	2.15	< .001
	4	5.77	1.61	.022

* Mean difference is significant with Bonferroni correction

Figure 4. CACREP and Non-CACREP Comparisons Across Four Time Points
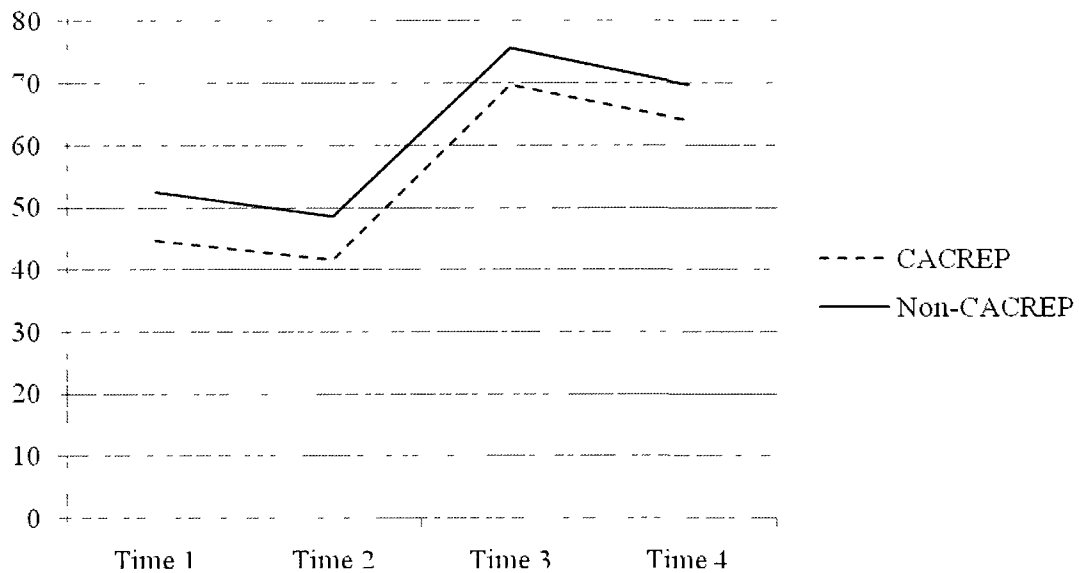
Figure 4. The dashed line illustrates the CACREP students mean SCIT-CP scores across all four data collection time points. The solid line represents the same data collection information for the non-CACREP group.

Research Hypothesis 7

Master's-level school counselors-in-training will report their master's level

training concerning crisis and trauma detection and intervention to be below adequate

(below 3 on a 5 point scale).

Question 19 on the SCIT-CP asked all participants to respond to the statement "I

would rate my master's-level training concerning crisis and trauma detection and

intervention as _____." A 5-point Likert scale was used to assess the response with 1

indicating "very inadequate" and 5 indicating "very adequate." Time 1 pre-test data were

used to answer this research hypothesis, and as such, the original 27 participants were

included in this analysis. Results from the analysis indicated the participants rated their

master's-level training for crisis and trauma detection and intervention as inadequate as

reported by an overall mean score of 2.59 on a 5-point scale ($M = 2.59$, $SD = .97$). As Research Hypothesis 7 stated that master's-level school counselors-in-training would initially rate their master's training as below adequate, as represented with an initial score of 3 or lower on a 5-point scale, Research Hypothesis 7 was supported.

Research Hypothesis 8

CACREP students will report a higher rating on their master's-level training concerning crisis and trauma detection and intervention than will the non-CACREP students.

Question 19 on the SCIT-CP was also used to compare CACREP and non-CACREP students on their ratings of their master's-level training concerning crisis and trauma detection and intervention. A 5-point Likert scale was used to assess the response with 1 indicating "very inadequate" and 5 indicating "very adequate." As with Research Hypothesis 7, Time 1 pre-test data were used to answer this research hypothesis, and the original 27 participants were included in this analysis.

To begin the analysis, Levene's Test for Equality of Error Variances was conducted to see if the homogeneity of variance assumption was met or unmet for the grouping variable. Results indicated that the CACREP and non-CACREP samples did not violate the assumption that error variances would be equal across the groups, $F(1, 25) = 3.14$, $p = .089$. As the homogeneity of variance assumption was not violated, an independent sample t test was used to assess the possible differences in master's-level training ratings between the CACREP and non-CACREP groups on Item 19.

From the independent sample t test, results indicated that CACREP and non-CACREP students did not report a statistically significant difference on their master's-

level training ratings, $t(25)$ = -.98, p = .336. While significant differences were not evidenced in the data, a further examination into the results was conducted to analyze the trends in the data. The mean rating score for master's-level training for CACREP students was 2.33 (SD = .71) on a 5-point scale and the mean rating score for non-CACREP students was 2.72 (SD = 1.07). Such data supports that differences in ratings do exist between the groups; however the trend in differences is not statistically significant. Based on these findings, Research Hypothesis 8 was refuted. Results from Research Hypothesis 8 are displayed in Table 12.

Table 12

Group Comparison of Counselor Training (Item 19)

Group	N	Mean	SD
CACREP	9	2.33	.71
Non-CACREP	18	2.72	1.07
Total	27	2.59	.97

Note. Non-significant differences between groups, $t(25)$ = -.98, p = .36

Research Hypothesis 9

School counselors-in-training will report crisis training for master's-level school counselors-in-training as essential to appropriate counselor training (as indicated as a 4 or higher on a 5 point scale).

Question 18 on the SCIT-CP asked all participants to respond to the statement "I believe that crisis training for master's-level school counselors-in-training is essential to appropriate counseling training." A 5-point Likert scale was used to assess the response with 1 indicating "strongly disagree" and 5 indicating "strongly agree." Time 1 pre-test data were used to answer this research hypothesis, and the original 27 participants were

included in this analysis. Results from the analysis indicate the participants believe that crisis training for master's-level school counselors-in-training is essential, as reported by a mean score of 4.89 (SD = .32). As Research Hypothesis 9 stated that master's-level school counselors-in-training would rate crisis training for master's-level counselors-in-training as essential as indicated by a mean score of 4 or higher, Research Hypothesis 9 was supported.

Summary

The purpose of the Main Study: Assessing the Effectiveness of Crisis Training was to investigate whether CACREP and non-CACREP students differed on their sense of preparedness to intervene in an unexpected student and teacher death crisis incident. Specifically, the objective was to assess if students reported a different level of preparedness following the crisis and trauma training intervention and then to follow-up with how their sense of preparedness was affected over time, one month later. General results from the study indicate that non-CACREP students reported a higher sense of preparedness over all four data collection time points than did CACREP students. Additionally, all students showed a significantly greater sense of preparedness following the crisis and trauma training. Research Hypotheses 1, 3, 5, 6, 7, and 9 were supported and Research Hypotheses 2, 4, and 8 were not supported. In the following chapter, interpretations, significance, implications of the findings, and directions for further research will be discussed.

CHAPTER FIVE: DISCUSSION

This chapter includes a discussion of the findings from the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training as well as additional conclusions and interpretations based on the research findings. In order to best explain the results from the Main Study, an investigation into each research hypothesis is offered. Implications and limitations of the study are also included along with suggestions for directions of further research.

The current study was designed to assess the effectiveness of a school-wide crisis and trauma management training for master's-level school counselors-in-training. To answer this research question, two pilot studies were first conducted. Pilot Study 1: Crisis Training Need Assessment was conceptualized in order to best identify the crisis training needs for a specific geographic region. Professional school counselors in a two-state area were asked to identify whether unexpected student/teacher death, school violence, war and world events, or natural disaster crisis incidents (a) most affected their student population, (b) was in most need of further training at the master's level, and (c) would receive the least amount of training in the future. Results from Pilot Study 1 supported that unexpected student and teacher death was the crisis category that affects students the most and is in need of further training at the master's level. Next, based on Pilot Study 1 findings, crisis training resources for unexpected student and teacher death incidents were gathered from the ASCA website and other ASCA referenced resources. Pilot Study 2: Crisis Training Feedback sought to gather quantitative and qualitative feedback from master's- and doctoral-level counselors-in-training who were not eligible to participate in the Main Study. Findings from this study led to adaptation of curriculum to best meet

participant needs in the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management Training. The Main Study sought to test the effectiveness of the curriculum developed to further train master's-level school counselors-in-training to detect and intervene in unexpected student and teacher death crisis incidents. Four data collection points were used over the course of a semester to examine initial levels of preparedness compared to preparedness levels immediately following the intervention and at a subsequent one month follow-up.

Conclusion

Overall results from the Main Study suggest that non-CACREP participants reported higher levels of preparedness to intervene in an unexpected student and teacher death crisis incident than did CACREP participants at all four data collection time points. While non-CACREP reported a greater sense of preparedness, all CACREP and non-CACREP participants reported a statistically significantly greater sense of preparedness to intervene in such crisis incident following the crisis and trauma training, and at the one month follow-up, than prior to receiving the training. Results from the study support that including a crisis and trauma training at the practicum and internship level can result in an increased sense of preparedness to intervene in an unexpected student and teacher death crisis incident for master's-level school counselors-in-training. Additionally, contrary to the research hypothesis, attending a CACREP accredited program did not result in a higher sense of preparedness at any data collection point. Implications for the study suggest that both CACREP and non-CACREP master's-level school counselors-in-training could benefit from receiving an additional crisis-specific training when enrolled

in a practicum or internship course. The following section offers a detailed discussion for each research hypothesis in the Main Study.

Research Hypothesis 1

Research Hypothesis 1 sought to assess initial levels of preparedness to intervene in an unexpected student or teacher death crisis incident by all CACREP and non-CACREP participants based on their mean SCIT-CP score. Data collected from the Time 1 data collection point were used to answer this research hypothesis as it was assumed that this pre-test data would most accurately answer initial levels of preparedness, prior to receiving the crisis and trauma training intervention. Results indicated that participants reported feeling unprepared initially to intervene in this type of crisis incident, as indicated by a mean SCIT-CP score of 51.9 (SD = 9.52). As the cut-off score of 59.5 was calculated to indicate "below prepared", results initially supported that participants reported feeling unprepared to intervene in an unexpected student or teacher death crisis incident.

To further investigate this hypothesis, the extracted mean and standard deviation for Item 17 on the SCIT-CP was analyzed. Item 17 asked all participants to report their feelings of preparedness to intervene in an unexpected student and teacher death crisis incident. Results indicated that participants rated their initial levels of preparedness as "below prepared" (M = 2.89, SD = 1.09) as represented by a mean score of below 3 on a 5-point score. As Research Hypothesis 1 predicted that participants would feel "below prepared", this hypothesis was considered tenable.

While results from this analysis support Research Hypothesis 1, it is important to note that the finding does not overwhelmingly suggest that participants feel initially

unprepared to intervene in unexpected student and teacher death crisis incidents. Turning

to research concerning self-efficacy may help explain some trends in this finding.

Previous research examining counselor-in-training self-efficacy, or the belief about what

one can do or whatever skill one possesses (Bandura, 1977), has been shown to have a

positive correlation between variables such as work experience, prior coursework

completed, and clock hours in internship (Tang, Addison, LaSure-Bryant, Norman,

O'Connell, & Stewart-Sicking, 2004). As such, to further examine a possible explanation

into initial feelings of preparedness in the Main Study, the demographic variables of

"crisis courses completed" and "crisis in-services received" were analyzed. Based on

beginning participant data, 40.7% of participants ($n = 11$ of 27) had completed at least

one (1) master's-level course in crisis counseling. Additionally, 55.6% of participants ($n =$

15 of 27) had also received at least one in-service training regarding crisis counseling. As

participation in such courses or professional development opportunities may increase

one's knowledge and understanding of crisis incidents, it is reasonable to assume that

they may also increase one's sense of preparedness to intervene in such events.

Research Hypothesis 2

Research Hypothesis 2 sought to compare CACREP and non-CACREP students

on initial feelings of preparedness to intervene in an unexpected student and teacher death

crisis incident. The 2009 CACREP standards state that school counselors-in-training

must develop skills and knowledge to understand "the operation of the school emergency

management plan and the roles and responsibilities of the school counselor during crises,

disasters, and other trauma-causing events" (p. 40). As such standards have been

formulated for CACREP programs, it was hypothesized that students enrolled in a

CACREP program who were required to adhere to such standards in counselor development and training would report a higher initial level of preparedness than would non-CACREP students. To answer Research Hypothesis 2, the mean SCIT-CP score from the Time 1 data collection time point, with the total score ranging from 0 to 85, was used to assess CACREP and non-CACREP group comparisons.

Results indicated an inverse outcome than was predicted with Research Hypothesis 2. Findings suggest CACREP and non-CACREP students did differ significantly on their initial levels of preparedness, $t(25) = -4.06$, $p < .001$, however non-CACREP students reported a greater sense of initial preparedness to intervene in an unexpected student and teacher death crisis incident than did CACREP students. Mean SCIT-CP scores were reported as 56.06 ($SD = 8.13$) and 43.56 ($SD = 6.09$) for the non-CACREP and CACREP group, respectively.

Results from Research Hypothesis 2 lead to various areas of discussion. One such discussion is that Research Hypothesis 2 was not only unsupported, but that results were inverse to the hypothesis. One explanation for this phenomenon is that while the 2009 CACREP standards require crisis preparedness to be evidenced through knowledge and skill, such newly revised standards were mandated for CACREP programs only one academic year prior to the start of the current study. As such, curricular changes and accommodations to meet this CACREP standard may not yet have been developed or implemented in the CACREP school counseling programs.

To further investigate the outcome of this research hypothesis, a separate inquiry was conducted into the school counseling course requirements at the two participating CACREP programs and the non-CACREP program. As the previous 2001 CACREP

standards did require that school counselors-in-training develop "knowledge of prevention and crisis intervention strategies" (p. 49), the inquiry served to assess what course options for crisis counseling were available to school counselors-in-training. In investigating the demographic variable of "crisis courses completed" for the CACREP sample, a dichotomy existed with 44.4% (4 of 9) participants reporting completion of two or more (2+) crisis counseling courses and 55.6% (5 of 9) participants reporting completion of zero (0) crisis counseling courses. Upon reviewing the school counseling program requirements, it was found that neither CACREP program had a *required* crisis counseling course for school counselors-in-training. While both of the CACREP programs offered a crisis counseling class, it was required only for the clinical mental health counselors-in-training. This course served as an elective course option for school counselors-in-training. Both CACREP universities did offer seminar courses which may have addressed crisis counseling. The seminar or elective course option may explain how some students reported completing no crisis courses while others reported completing more than two.

To investigate why non-CACREP students may have reported a higher sense of initial preparedness to intervene in unexpected student and teacher death, a similar inquiry was conducted. Of the non-CACREP participants, 38.9% (7 of 18) reported completing at least one course in crisis counseling. However, as with the CACREP programs, no crisis counseling courses were offered for school counselors-in-training. To clarify this inconsistency in course opportunity and self-reported course completion, a couple explanations are offered. Students may have completed a crisis counseling course at a different university and transferred the credit or may have enrolled in a crisis

counseling course in a related field (i.e. psychology). Furthermore, a seminar option may have been made available in previous semesters, similarly to the CACREP institutions.

The next step in identifying possible impacts for counselor preparedness was to assess in-service completion rates for CACREP and non-CACREP students. In-service trainings are specific, additional trainings related to a counseling topic, and have been shown to positively impact understanding and preparedness to intervene in a variety of crisis situations (Fonseca, 2008). As such, the "crisis in-services completed" variable was considered valuable in interpreting overall findings. Results from this inquiry offer that only 33.3% of CACREP students (3 out of 9) had received additional in-service training on crisis counseling as compared to 66.7% of non-CACREP students (12 out of 18). This finding suggests that while courses were not offered exclusively for school counselors-in-training at CACREP or non-CACREP institutions, non-CACREP students are self-reporting participation in additional in-service crisis trainings more frequently than are CACREP students. Such extracurricular trainings may be positively impacting their self-reported levels of preparedness to intervene in unexpected student and teacher death crisis incidents, thus leading to the results found in Research Hypothesis 2.

Possibly the greatest support for the refutation of Research Hypothesis 2 is the 2004 comparison study of factors impacting levels of self-efficacy in CACREP and non-CACREP counselors-in-training (Tang, et al, 2004). The study included 116 participants, with 48% representing CACREP students and 52% representing non-CACREP students, with participants being pooled from six universities in the Midwest. Participants completed a demographic questionnaire which surveyed courses completed, internship hours completed, work experience, and student enrollment status (part-time or full-time)

along with the Self-Efficacy Inventory (S-EI; Friedlander & Snyder, 1983) to assess self-efficacy in academics, assessment, individual counseling, group and family intervention, and case management. Results from the study showed that CACREP and non-CACREP students differed on various self-efficacy items, but not did vary significantly on the overall self-efficacy score. As with the Main Study, Tang et al. (2004) found that when differences did exist in self-efficacy scores, non-CACREP students reported greater self-efficacy than did the CACREP sample. While the Tang et al. study assessed self-efficacy specific to five counseling domains, the similarly in trends is worth noting. Prior educational and counseling experiences completed may play a role in self-reported sense of preparedness or efficacy in counselor training.

Research Hypothesis 3

Research Hypothesis 3 sought to assess if master's-level school counselors-in-training would report a greater sense of preparedness to intervene in an unexpected student and teacher death after receiving the crisis and trauma training intervention. Results from Research Hypothesis 3 supported the prediction that master's-level school counselors-in-training would report a greater sense of preparedness following the crisis and trauma training intervention. Using Time 1, Time 2, and Time 3 data collection points, participants reported a mean SCIT-CP score of 50.58 (SD = 9.24), 47.75 (SD = 47.75), and 74.38 (SD = 7.69) for the three data collection points, respectively. While the difference in mean SCIT-CP scores was not statistically significant between Time 1 and Time 2, differences were statistically significant in the Time 1 versus Time 3 and Time 2 versus Time 3 post-hoc comparisons. Such results support that participants increased

their sense of preparedness to intervene in an unexpected student and teacher death following completion of the crisis and trauma training intervention.

Results from this research hypothesis offer support for the value of in-service education as an additional educational experience for school counselors-in-training. The American School Counselor Association notes that "The importance of professional development can't be overemphasized, especially in a field as vital as education. Only by continually arming yourself with the latest research, techniques and knowledge in the profession can you hope to stay effective in your career" (ASCA, 2010b, Professional Development). To encourage such learning opportunities for professional school counselors and school counselors-in-training, on-site, state-level, and annual trainings are encouraged by ASCA to provide best practice counselor development (2010). Previous research has demonstrated that completion of in-service trainings specific to crisis counseling is positively correlated ($r = .39$) with sense of preparedness to intervene in a variety of crisis situations for Professional School Counselors (Fonseca, 2008). Such findings concerning the benefits of in-service training for crisis situations is further supported by the results for Research Hypothesis 3.

Research Hypothesis 4

Research Hypothesis 4 sought to assess if CACREP and non-CACREP students demonstrated a significant difference on sense of preparedness after receiving the crisis and trauma training. As previous research has shown the benefit of in-service training on preparedness for school counselors (Fonseca, 2008; Tang, 2004) it was predicted the training would deem beneficial for both groups, thus creating no significant difference between CACREP and non-CACREP students on overall sense of preparedness to

intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training.

Results from Research Hypothesis 4 indicate that CACREP and non-CACREP students did show a difference on sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training with non-CACREP participants reporting a greater sense of preparedness than CACREP participants, $F(1, 22) = 16.12, p = .001$. Also, as Research Hypothesis 4 used data from Time 1, Time2, and Time 3 data collection points, results further indicated that SCIT-CP total scores were statistically significantly different across the three time points, with scores being the greatest following the crisis and trauma training. Findings from this research hypothesis are contradictory to the prediction that CACREP and non-CACREP students would not differ on sense of preparedness following the crisis and trauma training.

One possible explanation into the incongruous trend in outcomes from this hypothesis is that the results from the research question mirror the results in the SCIT-CP pre-test data. Research Hypothesis 2 assessed possible differences in CACREP and non-CACREP participants' initial sense of preparedness with results indicating that non-CACREP students reported statistically significantly greater preparedness than did their CACREP counterparts. Throughout all three data collection time points, non-CACREP students demonstrated greater preparedness, thus while results refute the research hypothesis, they show consistency in trends for both groups of participants across time. Simply stated, it seem plausible to suggest that since non-CACREP students reported a

greater sense of preparedness at the initial pre-test that their sense of preparedness could consistently be greater than that of the CACREP students.

Lepkowski, Packman, Smaby, and Maddux (2009) conducted research into the area of counselor competence and self-reported skills and ability in counselors-in-training. By assessing 69 counselors-in-training self-reported competence scores at three time points across the semester, the researchers found that counselors-in-training often overestimated their ability prior to receiving training, tended to underestimate their ability following the training, and were accurate at the final semester evaluation of their skills. While the trend in the current study shows the greatest self-reported rating of preparedness at the Time 3 data collection point (immediately following the training), the initial rating may be consistent with the Lepkowski et al. (2009) research. Prior to the Lepkowski et al. (2009) study, Kruger and Dunning (1999) researched the same construct and found that poorly skilled individuals tend to overestimate their abilities whereas highly skilled individuals tend to underestimate their abilities. As comparison ratings were not conducted with expert-raters to offer an outside reviewer's impression of each counselor-in-training's competence or preparedness, the current study can only answer each research hypothesis with self-report data. As such, it is important to include these alternative theories to explain the outcomes in the data. In summary, the initial pre-test data may be inflated (Lepkowski, et al., 2009) and individuals at various time points may have overestimated or underestimated their self-reported sense of preparedness (Dunning, Heath, & Suls, 2004; Kruger & Dunning, 1999).

Research Hypothesis 5

Research Hypothesis 5 sought to assess the trajectory of impact that the crisis and trauma training may have on the participants' sense of preparedness to intervene in an expected student and teacher death crisis incident. Specifically, it was hypothesized that the school counselors-in-training would report a different sense of preparedness one month following the crisis training. Results from this research hypothesis support that differences in preparedness existed as participants reported a statistically significantly lower SCIT-CP score at the Time 4 data collection point than at Time 3, with mean SCIT-CP scores of 67.29 (SD = 6.22) and 73.07 (SD = 7.68) for Time 4 and Time 3, respectively.

The results from Research Hypothesis 5 echo previous research of learning and retention which suggests that over time, maintenance of knowledge and outcomes can decline (Bahrick, 1979; Bahrick & Hall, 2005; Conway, Cohen, & Stanhope, 1992; Kamuche & Ledman, 2005). As Time 4 SCIT-CP scores were significantly lower than at the Time 3 data collection time point, it is plausible that retention of the knowledge gained from the crisis and trauma training decreased with time, thus resulting in lower self-reported scores of preparedness.

However, an alternative view to this outcome may be offered from research by Lepkowski et al., (2009) in which they found that counselor-in-training self-reported levels of skill competence were lower at a follow-up post-test than immediately following skills training. From this study, the researchers posit that the most accurate self-assessment data may be gleaned at the follow-up analysis as "with additional study and practice, [students may be] better able to accurately self-assess their skills" (p. 370).This

notion of self-assessment accuracy improving over time parallels previous research

(Dunning et al., 2004; Kruger & Dunning, 1999). In sum, the change between Time 4 and

Time 3 data can be explained by the theory that learning decreases over time (Bahrick,

1979; Bahrick & Hall, 2005; Conway et al., 1992; Kamuche & Ledman, 2005) or by the

notion that the accuracy of perceived preparedness becomes more realistic over time

(Dunning et al., 2004; Kruger & Dunning, 1999; Lepkowski et al, 2009).

The decline in mean SCIT-CP scores between Time 3 and Time 4 provides

advocacy for the need for follow-up analysis during counselor-in-training development in

order to ensure student understanding and integration of content and skills. Brott (2006)

links the CACREP standards for effective education with the ASCA standards for

professional practice and notes that "it is imperative that counselor educators suffuse

accountability throughout the training program so that demonstrating effectiveness as a

school counselor develops as part of one's professional identity" (p. 180). Even though

Time 4 data collection scores were significantly lower than at the Time 3 data collection

point, participants still reported a statistically significantly greater SCIT-CP score at the

Time 4 post-test than they did at the Time 1 and Time 2 data collection points. Such

trends in the data would suggest that even at the one month follow-up where learning

outcomes decreased or self-assessment scores became more accurate, the self-reported

sense of preparedness was still significantly higher for all participants than prior to

receiving the training.

Research Hypothesis 6

Research Hypothesis 6 sought to assess if CACREP and non-CACREP students

would differ on their self-reported sense of preparedness one month following the crisis

and trauma training, with the assumption being that significant differences between the groups would not exist. While findings from Research Hypothesis 4 showed that the participants reported a statistically significantly different sense of preparedness following the crisis and trauma training, significant differences were not maintained between the CACREP and non-CACREP participants for the follow-up analysis. The analysis of marginal means showed that statistical differences were evidenced for the time variable (M = 72.65 and M = 66.88 for Time 3 and Time 4, respectively) however the marginal mean for school type was not significant (mean SCIT-CP scores at 66.83 and 72.69 for CACREP and non-CACREP participant, respectively). Research Hypothesis 6 predicted that differences would not exist between the groups, and as such, this hypothesis was deemed tenable.

When seeking to explain the statistically lower mean SCIT-CP score from Time 3 to Time 4, the findings mirror both theories of learning retention (Bahrick & Hall, 2005; Conway et al., 1992; Kamuche & Ledman, 2005) and of perceived competence (Dunning et al., 2004; Kruger & Dunning, 1999; Lepkowski et al, 2009) in which scores decline in follow-up analyses. In fact, based on theories of self-reported perceived competence, it is possible to assume that the Time 4 post-test scores are actually the most representative of the participant's sense of preparedness to intervene in an unexpected student and teacher death crisis incident.

When investigating the non-significant differences between CACREP and non-CACREP students in this analysis, it was first important to assess the mean trends in data. Overall, both groups reported their SCIT-CP score at Time 4 approximately 5 points lower than at Time 3 (69.67 versus 64.00 at Time 3 and Time 4 for CACREP

participants; 75.63 versus 69.75 at Time 3 and Time 4 for non-CACREP participants). To further extend the understanding of the follow-up data, Time 1, 2, 3, and 4 data were also considered. Interestingly, when considering all four data collection time points, CACREP and non-CACREP students do show a statistically significant difference, $F(1, 12) = 5.59$, $p = .036$. Specifically, non-CACREP students showed a statistically greater sense of preparedness than did their CACREP counterparts across the four data collection time points ($M = 54.96$ and $M = 61.56$ for CACREP and non-CACREP, respectively). When comparing this overall SCIT-CP score for each group across the four time points to the initial pre-test data collected at Time 1, both groups showed an improvement in their SCIT-CP scores, ($M = 43.56$ at Time 1 for CACREP participants; $M = 54.80$ for non-CACREP participants). This additional analysis confirms that sense of preparedness to intervene in an unexpected student and teacher death was positively impacted by participation in the crisis and trauma training. It further supports previous research with a similar construct that has found non-CACREP students to self-report greater self-efficacy scores than CACREP students (Tang et al., 2004).

While the current study was not measuring self-efficacy directly, it is worth noting that the components of efficacy (i.e. belief about ability and skill) were sought to be measured by the SCIT-CP as each item assessed "understanding" and "feelings of preparedness." Halverson, Miars, and Livneh (2006) discussed these constructs by researching changes in self-efficacy scores by students across their curriculum experience in a master's-level counseling program. Results indicated that students showed a "substantial gain in self-efficacy during their hands-on clinical experience" (p. 26). As all participants were currently enrolled in a practicum or internship course, and as the crisis

and trauma training integrated hands-on, experiential learning opportunities throughout the training, it can be asserted that sense of preparedness could have been positively impacted from the training. Furthermore, as non-CACREP students initially reported a greater sense of preparedness and these trends remained consistent across the four time points, both research findings by Tang et al. (2004) and Halverson et al. (2006) can offer a cleaner understanding into the phenomena evidenced in the current study.

Research Hypothesis 7

Research Hypothesis 7 sought to assess master's-level school counselors-in-training self-report of their master's training concerning crisis and trauma detection and intervention. Results were based off of the mean score from Item 19 on the SCIT-CP. Data collected from the Time 1 data collection point were used to answer this research hypothesis as it was assumed that this pre-test data would most accurately relay initial reports of master's-level training, prior to receiving the crisis and trauma training intervention. Results indicate that participants reported their master's-level training as inadequate, as evidenced by a mean score of 2.59 on a 5-point Likert scale. As Research Hypothesis 8 predicted that participants would report their training as "below adequate", this hypothesis was considered tenable.

It is important to note that while Research Hypothesis 8 was supported, results were not overwhelmingly indicative that master's-level training was inadequate. A partial explanation for this phenomenon may be that 40.7% of participants (11 of 27) did report having completed at least one course in crisis counseling. As such, participants may be reporting their training as somewhat sufficient due to exposure to some crisis counseling material.

To better understand the trends in response for Item 19, a frequency count was conducted. When assessing the frequency for each rating (1 = very inadequate, 2 = inadequate, 3 = undecided, 4 = adequate, 5 = very adequate), 21 participants rated their master's-level training as "undecided" or below (representing 77.7% of all participants). The remaining 6 participants rated their training as "adequate" (representing 22.3% of all participants). When further analyzing the self-reported "adequate" responses, all 6 participants had reported completing at least one course in crisis counseling (with 3 participants reporting 1 course and 3 participants reporting 2 or more courses completed).

The additional breakdown of data concerning Research Hypothesis 7 helps better support the trend in findings and helps offer a closer look at the results. While the mean score for Item 19 was a 2.56 on a 5-point scale, a better representation of the results may be to note that nearly 80% of all participants identified their master's level training as "below adequate." Such findings echo previous research concerning the need for more, and more effective, crisis and trauma education for school counselors-in-training (Allen et al.; Auger et al., 2004; Barjon, 2008; Hoheisel, 2005; King et al., 1999). For example, Allen et al. (2002) surveyed 236 ASCA school counselors and found that 57% reported feeling less than adequately prepared to intervene in crisis situations. Each of these studies, along with the results from Research Hypothesis 7 further illustrate the need for more sufficient crisis training at the master's level for school counselors-in-training.

Research Hypothesis 8

Research Hypothesis 8 sought to compare CACREP and non-CACREP participants' self-report of their master's-level training concerning crisis and trauma detection and intervention with the assumption that CACREP would report their training

more favorably. As CACREP has set mandates regarding the integration of crisis training within master's-level curriculum, this hypothesis was generated from the belief that such standards would result in more CACREP students completing crisis courses than non-CACREP student, thus leading to a more favorable report of their training. Data from Question 19 on the SCIT-CP at the Time 1 data collection point were used to compare CACREP and non-CACREP participants. Results indicated that the CACREP and non-CACREP students did not differ significantly in their self-report of their master's-level training concerning crisis and trauma detection and intervention, $t(25) = -.98, p = .336$. Mean scores for the two groups were 2.33 (on a 5-point scale) for CACREP students and 2.72 for non-CACREP students. Trends in the data would suggest that while statistically significant differences were not apparent in this comparison, non-CACREP students did show a more favorable rating of their master's-level crisis training than did their CACREP counterparts.

When seeking to explain this outcome, the best demographic data to consider were the self-reported number of crisis courses completed and in-service trainings received for both groups. As stated previously, 44.4% (4 of 9) CACREP participants reported completing 2 or more crisis counseling courses and 38.9% (7 of 18) non-CACREP participants reported completing at least one course in crisis counseling. This data corresponds with Hoheisel's (2005) study in which no correlation was found between CACREP accreditation status and crisis course offerings in master's-level programs. Beyond crisis courses opportunities, from personal communication with an internship course instructor at the non-CACREP university, often times, in-service training opportunities are provided for students within their regular curriculum courses to

help supplement the CACREP standards for additional crisis training (M. Dowdy, personal communication, July 18, 2010). Such dialogue is represented in the non-CACREP students self-report data concerning crisis in-service trainings received in which 66.7% of non-CACREP students reported completing at least one crisis in-service training, as compared to only 33.3% of CACREP students. The percentage of participants completing crisis courses between the CACREP and non-CACREP groups was similar, yet the percentage of students receiving crisis in-service training is doubled by the non-CACREP sample. As such, it seems plausible to support the findings from Research Hypothesis 8 with this relevant demographic data.

Research Hypothesis 9

Research Hypothesis 9 sought to assess if participants would report crisis training for master's-level school counselors-in-training as essential to appropriate counselor training. Data from Question 18 on the SCIT-CP at the Time 1 data collection point was used to answer this research hypothesis. Results indicated that participants view crisis training for master's-level school counselors-in-training as essential, as reported by a mean score of 4.89 (SD = .32) on a 5-point scale. Findings from this research hypothesis mirror previous research findings which have also illustrated the need for crisis training at the master's-level (Allen et al.; Auger et al., 2004; Barjon, 2008; Hoheisel, 2005; King et al., 1999).

Of special interest with this research hypothesis is the belief that crisis "training" can be deemed as beneficial, particularly in cases where a crisis course has not been added to the master's-level core curriculum. Hoheisel (2005) conducted a national survey of 200 school counselor education programs to research the availability of and

importance placed on crisis coursework. Results indicated that 23.4% of all programs did not offer crisis management preparation training to their students. Respondents reported "no room in the curriculum" as the most frequent explanation for why such courses were not offered. Interestingly though, 73.4% of participants rated crisis management preparation for school counseling students as very important. This disconnect between "need for crisis training" and "implementation of crisis training" further supports the findings from Research Hypothesis 9. Particularly for programs that have no availability for a crisis course option, participants are reporting training in general as a beneficial supplement to their curricular experience.

Limitations

The current study had many positive outcomes in promoting the need for and benefit of a school-wide crisis and trauma management training for master's-level school counselors-in-training. However, it is important to note the limitations to the methodology in order to discuss areas for improvement in future research.

Beginning with Pilot Study 1: Crisis Training Needs Assessment, one limitation to this study is the lack of generalizability of the crisis area most in need of training to other populations. Specifically, as the incidence of crisis situations differ based on geographic and demographic regions, a perimeter was defined in Pilot Study 1 in order to best serve the needs of a localized area. However, in doing so, these results are representative of that region and it may be difficult to transfer its relevance and applicability to another region.

As the pool for participants was limited by the perimeter set in Pilot Study 1, within the Main Study: Assessing the Effectiveness of a School-Wide Crisis Management

Training, the available participant sample was also limited. Only two CACREP-accredited programs and 4 non-CACREP accredited programs were eligible to participate in the Main Study. As such, the small sample size throughout this study can also create a barrier in generalizing the findings.

Another limitation to the Main Study is that accurate post-test data may have been difficult to obtain due to extra crisis in-service trainings or crisis counseling courses being offered to participants during the window between the four data collection time points. For example, one of the participating internship course instructors for the non-CACREP institution stated that in order to adhere to the CACREP provision for school counselors-in-training to have increased understanding of crisis situations and intervention response, additional trainings have been incorporated into their school counseling courses. "We presently do prepare our school counselors for crisis management. In the Foundations of School Counseling class, we do the following assignment: School Wide Crisis/Critical Incident/ Emergency Management PowerPoint presentation" (M. Dowdy, personal communication, July 18, 2010). While the aforementioned dialogue was regarding a training opportunity offered at the beginning of the students master's training (approximately one year prior), similar trainings may be added to the students' curricular experience throughout. This information reiterates the possibility that further crisis trainings could have been received throughout the data collection period. As such, this limitation is noted and regarded as a potential extraneous variable when interpreting findings.

Additionally, one participant from a participating CACREP institution was concurrently enrolled in a counseling ethics course and a practicum course. Such duel

enrollment may have exposed this CACREP participant to the ethical considerations of managing a suicide situation, an area within the unexpected student and teacher death crisis category addressed within the crisis training intervention (M. Ross, personal communication, September 7, 2010). As the student represents 11.1% of the CACREP sample (1 of 9 participants), this limitation may be significant considering the impact that this extra training can have in pre- and post-test data reporting for this sample. As it is nearly impossible to remove all the educational and professional development opportunities that can overlap during a master's students counselor training, this limitation is one that could not be avoided in the current study, but rather acknowledged and addressed accordingly in the discussion and limitations.

As with all self-report data collection, the potential for response bias is possible. Students may want to be seen favorably in their levels of preparedness to handle unexpected student and teacher death crisis incidents, and consequently self-report scores may be inflated. Students may also hold a false sense of competence concerning a counseling skill (Lepkowski et al., 2009). Additionally, response error may have occurred due to participants misunderstanding questions or falsely answering questions. For example, students may have considered courses that discussed crisis incidents or integrated crisis response in the curriculum (i.e. counseling ethics, counseling practicum, and counseling internship) as a "crisis counseling course." Such misrepresentation of enrollment and completion of a crisis counseling course can impact the trends in findings, such as when seeking to explain levels of preparedness based on completion of crisis courses or other demographic variables. Each of these aforementioned issues in self-reported data can affect the overall findings as well as the explanations and discussions of

findings. As such, these potential issues are certainly worth mentioning in the limitations of the current study.

Lastly, in designing the study, one control variable used was that all participants had to be currently enrolled in a school counseling practicum or internship course. For the current study, the trend in enrollment was that the CACREP participants were all enrolled in a practicum-level course while the non-CACREP participants were enrolled in an internship level course. Prior research has stated the importance of both practicum and internship courses in counselor development (Studer, 2005), however the difference in experiences or clinical hours completed can impact a counselors-in-training sense of preparedness (Tang, 2004). Due to this understanding, a final limitation to this study was the comparison of practicum-level CACREP students to internship-level non-CACREP students.

Implications for Counselor Education

The current study serves only as an initial step into exploring the effects of a school-wide crisis and trauma management training for master's-level school counselors-in-training, however it does provide substantial evidence into the benefits of such educational opportunities being available to students to promote a greater sense of preparedness to intervene in a specific crisis incident. In brief, all students showed a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident following the crisis and trauma training, and while the self-reported scores declined at the final data collection point, the scores still remained statistically significantly higher than they did at the Time 1 data collection point.

As practicum and internship-level school counselors-in-training are asked to develop their counseling skills through on-site work in school systems, it is imperative that counseling curriculum addresses issues such as crisis and trauma detection and intervention. Accrediting and credentialing bodies such as CACREP and ASCA have voiced the need for crisis counseling to be not only addressed, but imbedded throughout counselor training. Programs may have difficulty adding a whole course in crisis counseling for school counselors-in-training, however the current study serves as advocacy for the implementation of in-service training seminars to be incorporated into regular curriculum courses.

Beyond accrediting and credentialing standards, another important implication for the current study is that student participants recognized the benefits of a crisis and trauma training being implemented in their master's-level training. Results from this study support that students find value in these additional learning opportunities, and as such, counselor education programs can begin to think of alternative means to provide this curriculum to their students. For example, inviting a Red Cross representative or a local Hospice worker to a class could offer students additional training in crisis management and traumatization which could be utilized in their on-site work or future work as a Professional School Counselor.

Finally, ASCA has addressed the need for accountability in the school counseling profession. As CACREP has adjusted their standards to require more training in crisis management for school settings, it is imperative that counselor educators continue to monitor the effectiveness of these curricular changes. Particularly for programs that are reluctant to add whole classes in crisis management for school counselors-in-training,

continued research showing the effectiveness of crisis training on counselors' sense of preparedness could help advocate for training, of any kind, to be available for students. In assessing the effectiveness of these training opportunities, the ASCA accountability standard is also being promoted.

Directions for Further Research

The current study served to assess the effectiveness of a school-wide crisis and trauma management training for an unexpected student and teacher death crisis incident on school counselors-in-training sense of preparedness. From this research, many research questions were answered regarding the appropriateness of integrating a school-wide management crisis training to a core counseling course. Future research in these areas can help further substantiate the need for and effectiveness of crisis and trauma training for school counselors-in-training.

One direction for future research would be to assess school counselors-in-training sense of preparedness to intervene in crisis incidents at various points in their counselor training. For example, gathering pre-test data in a non-practicum or internship semester could glean the most accurate data about initial levels of preparedness as students may not yet have been introduced to in-service trainings for crisis counseling topics. In these early assessments in counselor training, a cleaner look into the effectiveness of the crisis and trauma training may be provided.

Furthermore, practicum and internship (and courses that include supervised opportunities) are identified as "the most critical experience elements in the program" (CACREP, 2003 as cited in Studer, 2005, p. 355). However, in reviewing the impact of this demographic variable on overall sense of preparedness, it cannot be overlooked that

in the current study, the non-CACREP participants were enrolled in an internship-level course while the CACREP participants were enrolled in a practicum-level course. Fonseca (2008) found that experience, such as counseling experience and graduate course work completed, was a predictor for counselors-in-training sense of preparedness to intervene in a crisis situation. Similarly, Tang et al., (2004) found that internship hours completed was more impacting on sense of counselor training self-efficacy than was accreditation status. Due to each of these findings, it is important to consider this variable in interpreting results. Possibly the reason that non-CACREP participants consistently reported a greater sense of preparedness to intervene in an unexpected student and teacher death crisis incident was due to their completion of practicum and current enrollment in an internship-level course. When considering these results and looking forward to future research considerations, grouping participants by practicum and/or internship hours completed may be one means to help control for extraneous influences in counselor development.

Another important aspect of counselor training in need of further research is assessing the trajectory of learning outcomes. Bjork (1999) found that short-term training opportunities for counselors-in-training can lead to short term gains in skill development, along with an inaccurate sense of competencies in these skills. Furthermore, ongoing evaluation of student learning is outlined as a CACREP responsibility to help ensure that students are developing personally and professionally (Hensley, Smith, & Thompson, 2003). As such, future research can include a longitudinal study with participants of a crisis and trauma training and follow-up on their sense of preparedness throughout the remainder of their counselor training and/or beginning work as a Professional School

Counselor. Such data, in either qualitative or quantities forms, could illustrate a better understanding of how sense of preparedness to intervene in specific crisis situations is impacted over time. In doing so, a better understanding of training practices needed to sustain learning can be conceptualized and implemented within master's-level counselor training.

At the most fundamental level, the newly revised CACREP standards for crisis training have been endorsed since 2009. With the increase in crisis incidents affecting school-aged students along and with the revised educational benchmark for these issues to be addressed in counselor training, now, more than ever, is the time for scholars to work to empirically support the benefits of training practices (Arman, 2000; Austin, 2003; Baggerly & Rank, 2005; Celotta, 1995; Gurwitch et al., 2001; Hebert & Ballard, 2007; Riley, 2000; Sorenson, 1989; Thompson, 1995; Wong, 2007). Assessing the benefits of the crisis training by comparing students who have not received crisis training to those who have could serve as one methodological approach. Also, replicating the study in other regions which also acknowledge unexpected student and teacher death as a crisis training need could also further support the use of a school-wide crisis management training in master's-level curriculum. In each of these studies, investigating CACREP versus non-CACREP participant outcomes can help continue to answer questions about accreditation status as an influence in counselor development.

Finally, future research could integrate self-report participant data with faculty expert-rater data to help compare and contrast perceived versus actual sense of preparedness for master's-level school counselors-in-training. As self-reported sense of preparedness may be inflated when reported by students (Dunning et al., 2005), it is

important to gauge the accuracy of preparedness for students who are working directly with a school-aged client base. This research area can help ensure best practices and counselor competence for school counselors-in-training. Through each of these directions for future research, the area of crisis and trauma training is being further investigated and, in turn, advancing the field of counselor training for future school counselors.

Conclusion

In 1999, Schmidt wrote an article to review the effectiveness of accreditation in counseling programs. In his piece, Schmidt questioned why, in the past two decades in which CACREP had been implemented, had few research studies assessed the relevancy and effectiveness of CACREP standards. From his perspective, the history and importance of accreditation were highly publicized, however the follow-through of outcomes of accreditation were lacking. While this piece was written over a decade before the conception of the current study, the question still poses much legitimacy. With the 2009 CACREP standards delineating the educational benchmark for counselor training, it is imperative that stakeholders in the field research the implementation and outcome of such newly revised standards. Specifically with the added interest for crisis counseling preparedness, now is the time to explore alternative training opportunities for school counselors-in-training to ensure that this standard is being not only implemented, but effective, for counselor development. While not all counselor training programs partake in the accreditation process, CACREP standards still underlie many counselor training programs in order to prepare counselors-in-training for the courses and experiences necessary to complete licensure and credentialing requirements. Crisis preparedness is just one area of the CACREP standards in need of further research to

assess outcomes. With school counselors playing such a pivotal role in crisis and trauma detection and intervention, and with the influx of crisis situations impacting school-aged children, this standard is not only interesting to stakeholders, but it is worthy of much attention. It is my hope that with continued research into the effectiveness of training models and experiences for this newly emphasized standard, counselor education programs will seek to prepare their students, regardless of accreditation status, to best meet the needs of those with whom they work and who are experiencing traumatization due to an unexpected student or teacher death crisis incident.

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APPENDIX A: SCCENA

School Counselor Crisis Education Needs Assessment (SCCENA)

For the purposes of the study, crisis incidents are being grouped into the following four categories:

> **Unexpected Student/Teacher Death-** This category involves the loss of life of a student or teacher within your school. Included in this category is suicide.
> **School Violence-** This category involves violent crimes at school (including school shootings or threats), vandalism, bullying, or other similar incidents.
> **War and World Events-** This category involves systemic crisis incidents affecting students, such as 9/11, the war in Iraq, or other threats to homeland security.
> **Natural Disasters-** This category involves systemic crisis incidents affect students related to our changing earth, including Hurricane Katrina, the earthquake in Haiti, tsunamis, tornadoes, or other related events.

Of the aforementioned crisis categories, which crisis category do you believe affects students in your school *the most*? (Please select one)

1. Unexpected Student/Teacher Death
2. School Violence
3. War and World Events
4. Natural Disasters

Of the aforementioned crisis categories, which crisis category do you believe master's-level school counselors-in-training could benefit from receiving additional education/training? (Please select one)

1. Unexpected Student/Teacher Death
2. School Violence
3. War and World Events
4. Natural Disasters

Of the aforementioned crisis categories, which crisis category do you expect to receive the *least* amount of training or education for in the future? (Please select one)

1. Unexpected Student/Teacher Death
2. School Violence
3. War and World Events
4. Natural Disasters

School Counselor Crisis Education Needs Assessment (SCCENA)

I am a(n) _____ school counselor (choose all that apply).

1. elementary
2. middle
3. high

I am a school counselor in _____.

1. Missouri
2. Arkansas

I have a worked as a school counselor for _____ years (Please fill in this blank with the TOTAL number of years you have worked as a school counselor).

_____

APPENDIX B: Email to School Counselor Program Coordinators

To Whom It May Concern:

My name is Elizabeth (Bea) Keller, and I am a doctoral candidate of counselor education at the University of Arkansas. I am currently working on my dissertation regarding crisis education training for master's-level school counselors-in-training. I am interested in studying the effects of receiving a 3-hour in-service on a selected crisis topic to assess if school counselors-in-training report feeling more adequately prepared to detect and intervene in the crisis incident as needed.

Before conducting my study, however, I need to collect preliminary data in a pilot study concerning *which* crisis incident current school counselors would identify as *the most necessary* for master's-level school counselors-in-training to receive crisis training. Specifically, I am contacting you as I am interested in distributing a short assessment via email to the school counselors in your district. The survey will ask current school counselors to assess which of the following crisis incidents affects their students the most: (a) unexpected student/teacher death, (b) school violence, (c) war and world events, or (d) natural disasters. Next, the school counselors will be asked to pick which of those crisis incidents could current master's-level counselors-in-training benefit from receiving additional education. Lastly, the school counselors will be asked to identify which crisis incident they expect to receive the least amount of training on in the future.

I appreciate your consideration and potential participation in this pilot study. As a certified K-12 school counselor, I see the need for expanded curriculum regarding crisis detection, intervention, and response. I am excited about this topic, and I am hopeful that you will consider participating. **In brief, participation would include a one-time distribution of an electronic link to the three-item assessment for school counselors in your district.** Data will be sent electronically to me, and as such, crisis needs will be identified for me to conduct my dissertation.

If you approve dissemination of the survey link, please simply forward the link (which is listed below) in an email to counselors in your district.

https://www.counselingtechnology.net/do.php?survey=s203188

Thank you again for considering participation in this pilot study! Regardless of your interest or disinterest in dispersing this survey, please send a quick reply email to let me know your decision. I look forward to hearing from you soon!

Thanks again!

Elizabeth A. Keller, M.S.
Doctoral Candidate
University of Arkansas

APPENDIX C: Email to Professional School Counselors

My name is Elizabeth (Bea) Keller, and I am a doctoral candidate of counselor education at the University of Arkansas. I am currently working on my dissertation regarding crisis education training for master's-level school counselors-in-training. I am interested in studying the effects of receiving a 3-hour in-service on a selected crisis topic to assess if school counselors-in-training report feeling more adequately prepared to detect and intervene in the crisis incident as needed.

Before conducting my study, however, I need to collect preliminary data in a pilot study concerning *which* crisis incident current school counselors would identify as *the most necessary* for master's-level school counselors-in-training to receive crisis training. As such, I am surveying current school counselors to gather this preliminary data. The survey will consist of **3 questions** followed by **3 demographic questions**. Information from this survey will help me develop crisis training curriculum for master's-level school counselors in training.

I appreciate your consideration and potential participation in this pilot study. As a certified K-12 school counselor, I see the need for expanded curriculum regarding crisis detection, intervention, and response. I am excited about this topic, and I am hopeful that you will consider participating. **In brief, participation would include a one-time completion of a three-item assessment followed by three demographic questions.** Data will be sent electronically to me, and as such, crisis needs will be identified for future training.

If you are interested in participating in this **one time surveying**, please click the link below. The survey should take approximately 5 minutes of your time.

https://www.counselingtechnology.net/do.php?survey=s203188

Thank you, again, for considering a one time participation in this pilot study.

Elizabeth A. Keller, M.S.
Doctoral Candidate
University of Arkansas

APPENDIX D: Informed Consent for Pilot Study 1

Informed Consent

Title: Pilot Study 1: Crisis Training Needs Assessment
For the study entitled: The effectiveness of crisis and trauma education on sense of preparedness for school counselors-in-training

Researchers:	*Administrators:*
Elizabeth A. Keller, M.S., Doctoral Candidate	Rosemary Ruff, Director
University of Arkansas	Research Compliance
Counselor Education Program	University of Arkansas
121 Graduate Education Building	120 Ozark Hall
Fayetteville, AR 72701	Fayetteville, AR 72701

Description: The current pilot study will assess *which* crisis incident (school violence, unexpected student/teacher death, war and world events, or natural disaster) current school counselors would identify as *the most necessary* for master's-level school counselors-in-training to receive crisis training. Participants will be asked to complete the electronic version of the School Counselor Crisis Education Needs Assessment (SCCENA).

Risks and Benefits: The benefits include providing counselor educators with insight into the crisis incidents in which master's-level school counselors-in-training could potentially benefit from receiving additional curriculum. The crisis incident identified in this study will lead to development of crisis curriculum for future studies regarding crisis counseling training for school counselors-in-training. There are no anticipated risks to participation in the study.

Voluntary Participation: Your participation in the research is completely voluntary.

Confidentiality: All collected information will be kept confidential by being saved in a password protected file on a password protected computer in a locked office.

Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time.

Informed Consent: I have read the description, including purpose of the study, potential risks and benefits, confidentiality, and the option to withdraw from the study at any time. My electronic signature on the informed consent and my completion of the survey indicates that I freely agree to participate in this study.

_____   _____
Electronic Signature   Date

APPENDIX E: Email to Pilot Study 2 Participants

To Whom It May Concern:

My name is Elizabeth (Bea) Keller, and I am a doctoral candidate of counselor education at the University of Arkansas. I am currently working on my dissertation regarding crisis education training for master's-level school counselors-in-training. I am interested in studying the effects of receiving a 3-hour in-service on a selected crisis topic to assess if school counselors-in-training report feeling more adequately prepared to detect and intervene in the crisis incident as needed.

Before conducting my study, however, I need to collect preliminary data in a pilot study concerning my overall presentation of content which will be delivered to participants in the main dissertation study. Specifically, I am contacting you as I am interested in presenting an abridged version (one hour) of an educational seminar on a specific crisis incident. I am seeking your feedback regarding the following three areas: clarity of content, the variability of teaching modalities used, and suggestions to improve the overall presentation. Information gleaned from your participation will help me make adjustments as necessary to my educational seminar which will be used in my dissertation.

I appreciate your consideration and potential participation in this pilot study. As a certified K-12 school counselor, I see the need for expanded curriculum regarding crisis detection, intervention, and response. I am excited about this topic, and I am hopeful that you will consider participating. In brief, participation would include you listening to a shortened version of an educational seminar on a crisis topic and answering three questions regarding that presentation.

Please contact me at your earliest convenience regarding your interest in participation. You can reach me through email at ekeller@uark.edu or by cell phone at 417-766-5061. I look forward to hearing from you soon!

Thanks again!

Elizabeth A. Keller, M.S.
Doctoral Candidate
University of Arkansas

APPENDIX F: Education Rating Form (ERF)

Education Rating Form (ERF)

How would you rate the *clarity* of the content (i.e. presenter defining important terms, using appropriate language, helping with ease of understanding content)?

1	2	3	4	5
Very Unclear	Unclear	Neutral	Clear	Very Clear

How would you rate the *learning modalities* used in the presentation (i.e. visual, auditory, and kinesthetic/experiential)?

1	2	3	4	5
Very Bad	Bad	Neutral	Good	Very Good

Please use the space below to offer general feedback about the presentation including suggestions which could improve the overall presentation.

APPENDIX G: Informed Consent for Pilot Study 2

Informed Consent

Title: Pilot Study 2: Crisis Training Feedback
For the study entitled: The effectiveness of crisis and trauma education on sense of preparedness for school counselors-in-training

Researchers:	*Administrators:*
Elizabeth A. Keller, M.S., Doctoral Candidate	Rosemary Ruff, Director
University of Arkansas	Research Compliance
Counselor Education Program	University of Arkansas
121 Graduate Education Building	120 Ozark Hall
Fayetteville, AR 72701	Fayetteville, AR 72701

Description: The current pilot study seeks to gather feedback regarding clarity of content, the variability of teaching modalities used, and suggestions to improve a crisis training presentation. Participants will be asked to offer information using the Education Rating Form (ERF).

Risks and Benefits: The benefits include offering specific suggestions and comments which will be used in tailoring curriculum to best meet the learning needs of current master's-level school counselors-in-training. As such, adaptations to curriculum will be made to offer an optimum learning experience for other counseling students. There are no anticipated risks to participation in the study.

Voluntary Participation: Your participation in the research is completely voluntary.

Confidentiality: All collected information will be kept confidential by being stored in a locked file cabinet in a locked office.

Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time.

Informed Consent: I have read the description, including purpose of the study, potential risks and benefits, confidentiality, and the option to withdraw from the study at any time. My signature on the informed consent and my completion of the instrument indicates that I freely agree to participate in this study.

_____   _____

Signature   Date

APPENDIX H: Crisis Training Manual-Abridged Version

Crisis Management for Student and Teacher Death:
A Training Guide for School Counselors-in-Training
ABRIDGED VERSION

An in-depth look at crisis management with K-12 students
following an unexpected death

Training manual developed by:
Elizabeth A. Keller, M.S.
University of Arkansas

1. Crisis versus Trauma
3. Suicide
   - Who is at risk?
   - Intervention: What to do
         - Steps 1 and 3
   - Contagion
4. Step-by-Step School-Wide Management of Unexpected Student/Teacher Death
   - Step 3: Identify "high risk" students
   - Step 4: Meet with "high risk" students and triage
   - Step 9: Discuss the counselor's role in the funeral or memorial
   - Step 11: Evaluate effectiveness of response and discuss modifications if
         necessary.
5. General Consideration

APPENDIX I: School Counselor-in-Training Crisis Preparedness (SCIT-CP)

School Counselor-in-Training Crisis Preparedness (SCIT-CP)

1. I understand the difference between the terms "trauma" and "crisis."

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

2. I understand the trilogy definition of crisis.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

3. I understand age-appropriate responses by children and adolescents following an unexpected student or teacher death crisis incident.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

4. I feel prepared to assess age-appropriate responses by children and adolescents following an unexpected student or teacher death crisis incident.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

5. I understand what classifies a traumatic response as `extreme` or a `warning sign` for childhood adjustment.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

6. I understand the characteristics that would classify a student as "at-risk" for suicide.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

7. I feel prepared to detect suicide warning signs in students.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

8. I understand the levels of suicide risk and lethality.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

9. I feel prepared to assess suicide risk or level of lethality in students.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

10. I feel prepared to intervene with students who are identified as at-risk for suicide.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

11. I understand the term "contagion."

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

12. I feel prepared to detect contagion situations.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

13. I understand what classifies a person as "high risk" following an unexpected student or teacher death crisis incident.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

14. I understand the steps to addressing school-wide management in the immediate day(s) following an unexpected student or teacher death.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

15. I feel prepared to serve as a member of a crisis management team within a school setting.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

16. I am familiar with resources to help me manage unexpected student or teacher death crisis incidents.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

17. I feel prepared to intervene in an unexpected student or teacher death crisis incident.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

18. I believe that crisis training for unexpected student or teacher death incidents can help me feel better prepared to detect and intervene in these situations.

1	2	3	4	5
Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree

19. I would rate my master's-level training concerning crisis and trauma detection and intervention as _____.

1	2	3	4	5
Very Inadequate	Inadequate	Undecided	Adequate	Very Adequate

APPENDIX J: Email to Practicum or Internship Instructors

To Whom It May Concern:

My name is Elizabeth (Bea) Keller, and I am a doctoral candidate of counselor education at the University of Arkansas. I am currently working on my dissertation regarding crisis education training for master's-level school counselors-in-training. I am interested in studying the effects of receiving a 3-hour in-service on a selected crisis topic to assess if school counselors-in-training report feeling more adequately prepared to detect and intervene in the crisis incident as needed.

Specifically, I am contacting you as I am interested in working with your master's-level practicum students for this study. Participation would involve allowing me to survey your master's level school counseling students *who are currently in practicum* across the semester (once at the beginning of the semester, again around midterms, and during the last week of class). This survey would take place via email (I will send an electronic survey to your students via email). Additionally, if you agree to participate, I would come to your class during a regularly scheduled class period (between mid-October to mid-November) to present a three-hour educational session on a crisis topic. The crisis topic presented to your students will be unexpected student/teacher death. This crisis category was identified by current professional school counselors in a pilot study conducted in the summer 2010 as a crisis area in need of further training at the master's level.

I appreciate your consideration and potential participation in my research study. As a certified K-12 school counselor, I see the need for expanded curriculum regarding crisis detection, intervention, and response. I am excited about this topic, and I am hopeful that you will consider participating. In brief, participation would include a three-time surveying via email of your practicum-level school counselors-in-training along with a three-hour in-service that I will provide to your students regarding detecting and intervening with a specific crisis incident.

Please contact me at your earliest convenience regarding your interest in participation. You can reach me through email at ekeller@uark.edu or by cell phone at 417-766-5061. I look forward to hearing from you soon!

Thanks again!

Elizabeth A. Keller, M.S.
Doctoral Candidate
University of Arkansas

Appendix K: Email to Instructors with Timeline

Hello practicum and internship instructors,

I would like to begin by thanking each of you for partnering with me over the upcoming semester. I am excited about the opportunity to present crisis training curriculum regarding unexpected student and teacher death to your master's-level school counselors in training. I am equally excited to gather data and explore the outcome of such programs on sense-of-preparedness for our school counselors-in-training.

I would like to offer a "timeline of events" for the upcoming semester to help with ease of data collection. The following list highlights important dates.

August 23- I will email each of you with an electronic link to the pre-test. Please forward the email with the link to the survey to your students in your practicum and internship class(es) as soon as possible. Please urge them to complete the electronic survey by the end of the week in order to obtain accurate pre-test data.

October 11-27- I will be traveling to each of your universities to present the crisis training curriculum. I will collect data both before and after I present. I will bring copies of the crisis training manual for each of your students.

December 1- I will email each of your with an electronic link to the post-test. As with the initial email, please forward this email to your students and urge them to complete the survey ASAP, in order to obtain accurate post-test data.

Again, I appreciate your interest and involvement in this study. I can be reached via email at ekeller@uark.edu or keller.counselor@gmail.com or by phone at 417-766-5061. If you have **any** questions, please do not hesitate to call or email.

Thank you again. You'll be receiving an email from me in 1 week with the electronic link to the pre-test survey.

Appendix L: Demographic Form

Demographic Form

1. I am a counseling student at _____ (write in your school name).

_____

2. I am completing a practicum or internship in _____ counseling (choose all that apply).

___ elementary school
___ middle school
___ high school

3. I have completed ____ master's-level course(s) in crisis counseling.

___ zero (0)
___ one (1)
___ two (2)
___ more than two (2+)

4. I have received ____ in-service or professional development opportunities for crisis counseling.

___ zero (0)
___ one (1)
___ two (2)
___ more than two (2+)

5. Race/Ethnicity: (please check all that apply)

___ Caucasian
___ Hispanic
___ African American
___ other (please specify) _____

6. Sex:

___ Male
___ Female

7. Please create an identification code using the FIRST 3 LETTERS of your last name and the LAST 3 NUMBERS of your social security number (example: SMI287). This identification code will be used throughout your participation in the current study.

_____

Appendix M: Informed Consent for Main Study Participants

Informed Consent

Title: Main Study: Assessing the Effectiveness of Crisis Training
For the study entitled: The effectiveness of crisis and trauma education on sense of preparedness for school counselors-in-training

Researchers:

Elizabeth A. Keller, M.S., Doctoral Candidate
University of Arkansas
Counselor Education Program
121 Graduate Education Building
Fayetteville, AR 72701

Administrators:

Rosemary Ruff, Director
Research Compliance
University of Arkansas
120 Ozark Hall
Fayetteville, AR 72701

Description: The current study seeks to investigate the effectiveness of crisis and trauma education for master's-level school counselors-in-training. Of specific interest is the impact that such training and education might have on the future school counselors' sense of preparedness in crisis and trauma detection and intervention. Participants will be invited to complete the School Counseling-in-Training Crisis Preparedness inventory (SCIT-CP) which involves two pre-tests and two post-tests along with receiving a 2 1/2 hour crisis training seminar over the course of a semester during enrollment in a practicum or internship course.

Risks and Benefits: The benefits include adding crisis and trauma detection and intervention information to one's professional repertoire of skills which could lead to feeling better prepared for potential crisis incidents which one may experience within a school setting. There are no anticipated risks to participation in the study.

Voluntary Participation: Your participation in the research is completely voluntary.

Confidentiality: Participants will create a 6-digit identification code to secure their anonymity. All collected data will be kept confidential by being stored in a locked file cabinet in a locked office. Data collected online will be saved in a password protected file accessible only by the principal researcher.

Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time.

Informed Consent: I have read the description, including purpose of the study, potential risks and benefits, confidentiality, and the option to withdraw from the study at any time. My signature on the informed consent and my completion of the instrument indicate that I freely agree to participate in this study.

_____   _____
Signature   Date

Appendix N: Crisis Training Curriculum Manual

Crisis Management for Student and Teacher Death:
A Training Guide for School Counselors-in-Training

An in-depth look at crisis management with K-12 students
following an unexpected death

Training manual developed by:
Elizabeth A. Keller, M.S.
University of Arkansas

1. Terms to Know
   - Grief
   - Bereavement
   - Mourning
   - PTSD
2. Crisis versus Trauma
3. Suicide
   - Who is at risk?
   - Behavioral Indicators
   - Intervention: What to do
   - Contagion
4. Step-by-Step School-Wide Management of Unexpected Student/Teacher Death
   - Step 1: Attend a morning staff meeting
   - Step 2: Identify and assist school staff in need of extra support
   - Step 3: Identify "high risk" students
   - Step 4: Meet with "high risk" students and triage
   - Step 5: Identify absent "high risk" students
   - Step 6: Assess students who wish to leave school early due to grief reactions
   - Step 7: After school staff meeting
   - Step 8: Hold a Crisis Management Team (CMT) meeting to update "high risk" student list
   - Step 9: Discuss the counselor's role in the funeral or memorial
   - Step 10: Review memorial requests with the principal and CMT.
   - Step 11: Evaluate effectiveness of response and discuss modifications if necessary.
5. General Consideration