Surveying School Counselors via the Internet Regarding Their Experiences and Training Needs in Crisis Intervention

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Abstract

Crisis intervention is a responsibility of school counselors. Specific training in crisis intervention skills is recommended for performing adequately in crisis situations, however, no generally accepted standards exist for training school counselors in crisis intervention. This exploratory study was conducted entirely online. Participants in the study were recruited via email and listservs and accessed a website to complete a survey. State certified school counselors (n=517) from across the United States (response rate 47%) participated. The following research questions were investigated: (1) Do these school counselors have training in situational crisis intervention skills? (2) What is the format and source of this training? (3) What situational crises have these counselors faced in their work? (4) Do these counselors feel adequately prepared for crisis situations? (5) Do these counselors differ in their preparedness according to demographic variables? (6) What additional training regarding crisis intervention do these counselors believe they need? Results indicate the majority of participants have had training in crisis intervention. Significant differences in level of training were found based on years of experience, age group, and ethnic group. The most frequently cited training topics previously received by respondents are stages of grief, suicide prevention and intervention, and assessment and referral. The most frequently encountered crisis situations are suicide ideation, child physical abuse, child sexual abuse, and suicide gesture. The average percentage of time spent by respondents on crisis intervention is 17%. Over 50% of respondents report being adequately prepared as the result of training for crises related to suicide, violence, accidents, and alcohol/drugs. Forty-six percent
report being adequately prepared for crises involving disaster. For each of the five categories of crisis (suicide, violence, accidents, alcohol/drugs, disaster), respondents with 1-5 years of experience report lower perceptions of preparedness as the result of training than the other groups. Elementary counselors report lower levels of preparedness for suicide and alcohol/drug related crises. High school counselors report lower levels of preparedness for disaster. Eighty-nine percent of respondents wish to have additional training in crisis intervention. The most desired training topics are responding to violence, psychological first aid, crisis simulations, Critical Incident Stress Debriefing, and legal/ethical issues in crisis intervention.
Dedication

To Sweetie, you forever remind me that love is what really matters.

To Mathew, you help me grow and learn about myself, life, and the world in ways I could never have imagined, you're the best snuggler - and you remind me that love is what really matters. Thank you for your love and support through this process, not only the dissertation, but in life.

To Mom, you teach me through your example and faith that I can do it, whatever it is - and through your gentleness, that love is what really matters.

To Dad, you teach me that laughter and kindness are important parts of any endeavor, that life can be lived with a light heart, and that love is what really matters.

To Jeff, I remember that there's no such place as far away with people that you love; but I wish you were here, I miss your gentle spirit.

To all the middle-schoolers who have trusted me enough to share their stories and feelings, I am honored. May I be worthy of that relationship.

To our school counselors, who give their best to improve the lives of children, thank you!
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Chapter One: Introduction

In recent years, significant attention has been focused on crisis management in schools. Media coverage of tragic crises such as the shooting incidents in Paducah, Kentucky, and Littleton, Colorado, in which students planned and carried out attacks on their peers and teachers at school, has led many school personnel to the realization that “it can happen anywhere.” No longer is violence in schools perceived as something that happens only in urban areas. Although these events have created a resurgence of interest and a sense of urgency in finding solutions, concern regarding crime and violence in schools is not new. In 1978, the National Institute of Education published a report to Congress suggesting that crime and violence rates in schools were relatively high; the statistics have increased since that time (Pitcher & Poland, 1992).

Violence in the community also impacts schools. Violent crises such as the terrorist attack of September 11, 2001, for example, impact many schools directly with safety and trauma issues as well as confusion, fear, and grief. They also affect many schools indirectly as school staff members struggle to make decisions regarding how and when to share information with students and how to help students and themselves to cope with a devastating event. In the days following September 11, school counselors were “inundated with requests from parents and students alike to help them deal with their feelings of grief and trauma” (Lovre, 2001, pg. 18). We may be entering a new era in which large-scale, unpredictable emergencies become more common. In addition, consequences for those who plan violent attacks may be changing as well. As recently as December 2001, three high school students who had made plans to detonate explosives at a local school and a courthouse were charged with terrorist training activities and conspiracy to commit murder ("Three teens," 2001).
Another all too common crisis is suicide. According to the National Institute of Mental Health (1999), suicide was the third leading cause of death among 15 to 24 year olds in 1996 (accidents and homicide were numbers one and two), confirming suicide as one of the list of events that school personnel encounter. Authors acknowledge the broad impact of events such as these, stating that in our increasingly violent society, school counselors realize that violent events impact all members of the school community (Hutchins & Vaught, 1997).

Man-made and natural disasters also create crises in schools. Solomon’s and Greene’s (1992) review of the literature on mental health effects of disasters listed effects ranging from Post Traumatic Stress Disorder symptoms, depression, substance abuse, anxiety, and somatization to physical illnesses, behavioral problems and general distress as responses to disasters such as tornadoes, floods, mudslides, dam collapses, and fire. Certainly such traumatic events in a community will impact students and staff, making coping with the mental health effects a requirement for school counselors and other faculty members.

In addition to major events, schools regularly encounter situations that are emergencies, have the potential to affect multiple people in a school and/or community, and have a negative impact on the school as a whole. Car accidents, physical and sexual abuse, serious illness, and divorce and separation are all events that are not unusual, but are considered crisis situations. According to Castro-Blanco (2000, pg. 273), “most crises involving children and adolescents either occur at school, are associated with school, or are first detected at school,” many students in crisis are seen by educational professionals rather than mental health professionals, and “…schools have become a primary site, not only to identify, but to provide treatment for a variety of high-risk problems (citing Bostic & Rauch, 1999).”
As stated by Brock, Sandoval and Lewis (1996, p. xi) the purposes of schooling “include facilitating the development of both cognitive/academic and personal/social skills.” Crises have the potential to interfere with student development in both these areas. Inadequate resolution of a crisis can negatively affect cognitive functioning and interfere in social and emotional development (Brock, Sandoval and Lewis, 1996). According to Caplan (1964), “a person’s present state of mental health can be viewed as a product of the manner in which a series of crises have been solved in the past” (p. 19). Clearly this demonstrates the importance of school personnel’s assisting students in resolving crises.

Rationale for the Study

Around the country, school systems are working to devise and update plans for preventing and coping with crisis situations. School counselors have an important role in this work. According to Petersen and Straub (1992), counselors are central in both the planning and implementation phases of school crisis teams. Counselors are the staff members who are expected to have knowledge and skills in mental health issues and are likely to be the staff members responsible for follow-up with students regarding the psychological aspects of crisis intervention after a crisis event occurs (Petersen & Straub, 1992). According to Brock, et al. (1996), a staff member with background in school counseling or school psychology usually fills the role of crisis intervention coordinator with the designated function of coordinating psychological “triage,” referral, and crisis counseling during and following a school crisis. In a study of the roles, functions and training needs of school counselors conducted by Ballard (1995), crisis intervention counseling emerged as one of the three major roles reported by school counselors. In fact, a recent study involving graduate students in a school administration
preparation program (Fitch, Newby, Ballestero & Marshall, 2001) found that future school
administrators rated direct crisis response as the most important duty of school counselors.

Schonfeld and Newgass (2000) discuss the fact that dealing with the impact of crisis is
not the primary mission of schools. They see this fact as the probable explanation for the lack of
preparedness for crisis intervention. In addition, Schonfeld and Newgass discuss the importance
of training in crisis response by describing the responses of two schools to similar crisis events
involving gun accidents that occurred off school grounds. Previously trained staff reported that
handling of the event resulted in increased respect for the school leadership and feeling closer as
a school community. Handling of the event in the school where there had been no training
resulted in confusion, transferring the directly affected student to another school and delay in
addressing the needs of both the directly affected student and other students.

Several authors in the crisis intervention field have stated the importance of specific
training in crisis intervention skills (Greenstone & Leviton, 2002; Johnson, 2000; Myer, 2001;
Poland & Pitcher, 1992; Schonfeld & Newgass, 2000). For example, Greenstone and Leviton
point out that training in counseling or another helping field “does not ensure skilled crisis
management (2002, pg. 46).” James and Gilliland (2001) state that in order to intervene
successfully in crisis situations, new skills in assessment and dealing with people in
unpredictable situations must be learned. Johnson (2000) stresses the importance of training
school staff who are already trusted members of the school community in crisis intervention
skills and alludes to the possible legal liability involved in having staff members who are
intervention through on-the-job training. That is, they learn the needed skills through a trial-and
error method while helping a client through a crisis situation. Professionals soon learn that basic
therapeutic skills, while useful, are not sufficient in crisis situations (p. 1).” Several studies have been conducted regarding school psychologists and crisis intervention. One study found that school psychologists did not feel they had proper training or were qualified to respond to school violence (Furlong, Babinski, & Poland, 1994). This study could have implications for the level of preparedness of school counselors as well, assuming that counselors and psychologists have similar experiences with violence in their jobs and that training programs have similar content in relation to crisis intervention.

No recognized standards for training school counselors in crisis intervention exist; despite the fact that authors and organizations agree that crisis intervention is an important aspect of school counselor preparation. The Council for Accreditation of Counseling and Related Educational Programs (CACREP) mentions crisis intervention in its Standards for School Counseling Programs. In addition to the core curriculum of professional identity, social and cultural diversity, human growth and development, career development, helping relationships, group work, assessment, research, and program evaluation required of all CACREP accredited programs, school counseling programs have specific requirements related to foundations, contextual issues, school counseling skills, and clinical experiences. Item B.7. of the School Counseling Standards is “knowledge of prevention and crisis intervention strategies” (CACREP 2001, pg. 34). The exact concepts and strategies are not delineated. The American School Counselor Association (ASCA) does not mention crisis intervention specifically in its National Standards (Campbell & Dahir, 1997); however, it does have a position statement describing the school counselor's role in critical incident response, development and implementation of critical incident response plans, and critical incident stress debriefing for students, staff and counselors (American School Counselor Association, 2000). Riley and McDaniel (2000) stress the
importance of training for school counselors regarding specific aspects of their roles, including violence prevention, intervention and crisis response. Pitcher and Poland (1992) state that all school personnel need crisis intervention skills and should be trained to manage crisis situations to the extent that is appropriate for their roles.

Statement of the Problem

The following facts have been established: (a) school counselors encounter crisis situations as an aspect of their jobs, (b) crisis intervention is a responsibility that falls on school counselors, (c) specific training in crisis intervention skills is recommended for performing adequately in crisis situations, and (d) no generally accepted standards exist for training school counselors in crisis intervention. Studies have been conducted on crisis intervention in schools (e.g., Timmerberg, 1991), long-term effects of crisis intervention skills training on teachers (Taylor, Brady & Swank, 1991), crisis intervention training as part of teacher preparation programs (Taylor, Hawkins & Brady, 1991), and school psychologists’ self-reported crisis intervention training needs (Tabasso, 2001). The problem for this study to address is that it is not known what crisis situations school counselors have experienced in their jobs, whether they have training in crisis intervention skills or how they received training, or whether they perceive themselves as prepared for crisis situations.

Purpose of the Study

The purpose of this study was to gather information regarding the crisis intervention training of practicing school counselors who use the Internet. Specifically, the study: (a) assessed whether practicing school counselors have training in crisis intervention skills, (b) gathered information regarding situational crises they have faced in their jobs, (c) determined their self-reported training needs related to crisis intervention, and (d) examined the relationship between
school counselors’ training in crisis intervention skills and their perceptions of being prepared for crisis situations.

The following research questions were addressed in this study:

1. Do participating school counselors have training in situational crisis intervention skills?
2. What is the format and source of this training?
3. What situational crises have participating school counselors faced in their work?
4. Do participating school counselors feel adequately prepared for crisis situations?
5. Do participating school counselors differ in their preparedness according to demographic variables (school grade level, school setting, location, training received, years of experience, gender, ethnicity)?
6. What additional training regarding crisis intervention do participating school counselors believe they need?

The outcomes of the study have implications for policy changes in counselor education graduate programs and regulating bodies, for licensure boards, and for training of school counselors and other school personnel in the field. The study also produced ideas for future research in this previously unexplored area.

Methodology

The study was conducted utilizing a web-based survey, an increasingly utilized method of conducting educational survey research (White, Carey & Dailey, 2001). According to Sabella (2000), school counselors in many areas of the United States have the necessary equipment and skills to conduct computer conferencing, use e-mail, utilize multimedia software, develop databases, and access the Internet. In their study of computer utilization by Kentucky school counselors, Owen and Weikel (1999) found that 88 percent of school counselors had been
assigned a computer to support the counseling program and 97.8 percent had access to a computer at work. Another finding was that 28.9 percent of respondents use computers for email and 13.3 percent use computers for Internet research. While restricted to responses in only one state, these findings indicate that a substantial number of school counselors have interest and access to the means necessary to participate in this study.

The survey instrument was designed based on a review of the literature and input from experts in crisis intervention, piloted with practicing school counselors and then posted on a web site. Participants were sought based on their existing access to internet-based resources. An announcement about the study was posted to several counseling related listservs, newsletters, and web sites. The announcement provided an email address for interested school counselors to send their contact information to the researcher. The researcher then used email to send each responder a direct link to the survey web site. Participants accessed the web site and completed the questionnaire.

The survey included demographic variables (age, gender, ethnicity, years of experience, school level – elementary, middle, or high, geographic location, setting, public or private school, ASCA membership) as well as variables relating specifically to crisis intervention and training (crisis situations encountered, training received, perceived preparedness for crisis intervention, perceived need for additional training). Data analysis included frequency distributions as a means of examining level of training, level of preparedness, frequency of encountering specific crises, and training needed. Relationships between variables were examined through the use of crosstabulations and multiple regression analysis. Results are reported according to the demographic variables and in terms of the relationships between the demographic variables and perception of preparedness and need for training.
Definition of Terms

The following definitions clarify terms that are used in this study.

Crisis: Several authors (e.g., Caplan, 1964; Greenstone & Leviton, 2002; Kanel, 1999; Myer, 2001) describe a generally accepted definition of crisis as consisting of a decreased level of functioning due to a precipitating event that is perceived negatively and overwhelsms the victim’s coping mechanisms. A person is then said to be in a “crisis state.”

Two types of crisis are described in the literature, developmental and situational (Kanel, 1999). Developmental crises are the result of naturally occurring changes due to maturity or life stage and occur for most people at some points in life. This includes typical life transitions involved in starting school, getting married, having a child or entering a new developmental stage (e.g., adolescence).

Situational crises are unique and unpredictable. The four characteristics that make situational crises different from developmental ones are (a) they have a sudden onset, (b) they are unexpected, (c) they can be classified as emergencies, and (d) they have the potential to impact the community (Slaikeu, 1990). Examples of situational crises include car accidents, assault, abuse, sudden death, and natural disaster. Situational crises are the ones for which school crisis plans are designed and will be the focus for this study.

Crisis intervention: Hoff (1984) describes crisis intervention as “a short-term helping process. It focuses on resolution of the immediate problem through the use of personal, social, and environmental resources” (p. 4). Slaikeu (1984) states that crisis intervention “is intended to reduce the probability of debilitating effects, and to maximize the probability of growth or mastery for the individual. Target populations are crisis victims and their immediate families and friends” (p. 10). For this study, crisis intervention consists of the activities conducted by school
personnel that are designed to minimize the negative effects of situational crises and ensure the return to pre-crisis functioning of students, staff and the school.

School counselor: school counselor with state certification working in K-12 schools.

Delimitations and Limitations

This study was exploratory in nature, attempting to provide accurate information regarding crisis intervention experiences, preparedness, training, and training needs of participating school counselors from the United States who use the Internet. It assumed that information provided by the participants is true. Another assumption is that participants who identified themselves as school counselors are actually school counselors. The sample was limited to counselors who use the internet/email and volunteered to participate. Data was not collected from counselors who did not receive notification of the study or who do not utilize electronic communication methods.

Data collection for the study was limited to three weeks and therefore collected information only from counselors who responded within the time limit. Many surveys typically have longer data collection periods. There is considerable support in the literature for the likelihood of fast response to electronic surveys. Matz (1999) shares that one group received their first response within twenty minutes, another group received 39 percent of their responses within two to three days, one group received 90 percent of their responses within four days, and several studies received the majority of their responses within one to two weeks of posting their surveys. The delimitation of a three-week collection period was based on this support in the literature for quick responses to electronic surveys.
Summary

Chapter One began with an introduction to the topic of school crisis intervention and its importance in the current state of affairs in schools. School counselors’ involvement in crisis intervention was then described, along with the importance of specific training in crisis intervention and the lack of training standards. The Statement of the Problem indicated that no studies could be located regarding school counselors’ experiences, training, and training needs in crisis intervention. The methodology for the study was described, including the web survey design, variables, and means of recruiting participants. Several important terms were defined for the study. The chapter closed with discussion of the limitations and delimitations.
Chapter Two: Review of the Literature

Recent events involving school and societal violence, increasing suicide rates among youth, and recognition of the trauma resulting from man-made and natural disasters have increased focus on crisis management in schools. Schools have an opportunity and responsibility to assist students and staff in resolving trauma and school counselors are central figures in this work. There is not an abundance of literature relating to school crisis intervention. It seems that we are at the beginning of the development of research and recommendations for practice in this area. While several resources exist regarding management of crisis in schools, their focus is generally upon ensuring physical safety of students and staff, coping with emergency services and the media, and minimizing disruption. The majority of school crisis books and articles reviewed for this study devote only one section, if that, to the crisis intervention aspects of crisis management.

Chapter two will focus on three areas in the literature in order to provide a framework for understanding the role of the school counselor in crisis intervention. First, an introduction to crisis intervention theory will be provided. Second, school crisis intervention focusing on the role of the school counselor will be described. Finally, the literature regarding crisis intervention skills training will be discussed.

Crisis Intervention Theory

The beginnings of the field of crisis intervention can be traced back to the work of Eric Lindemann in the 1940s. Lindemann studied the grief process of relatives of victims and survivors of the Coconut Grove Nightclub fire in Boston in 1942. He identified short-term reactions and abnormally long reactions in bereaved persons. Based upon his work with this
group and others, he delineated stages of the grief process and possible interventions to assist people in resolving grief and trauma (Fairchild, 1997).

Later, in 1946, Gerald Caplan and Lindemann began to work together in one of the first community mental health programs that focused on prevention of mental health problems (Brock et al., 1996). Caplan expanded on Lindemann’s ideas and discussed them in more depth, observing that crises result not just from situations such as the nightclub fire, but also from developmental transitions (Pitcher & Poland, 1992; Slaikeu, 1984) and that social and personal resources impact a person’s adjustment and help determine whether transitions are negotiated successfully. Over time, these concepts have evolved into the commonly accepted definitions of crisis, situational crisis, and developmental crisis described earlier.

Crisis intervention models are short-term procedures designed to assist people who are in a crisis state in order to minimize negative effects and restore emotional equilibrium. Slaikeu (1984) describes the crisis state as “a temporary state of upset and disorganization, characterized chiefly by an individual’s inability to cope with a particular situation using customary methods of problem solving, and by the potential for a radically positive or negative outcome” (p. 13). The potential for either positive or negative outcomes demonstrates the importance of crisis intervention in facilitating responses that increase the likelihood of positive outcomes. Crisis intervention, according to Slaikeu (1984), is provided immediately at the time when negative outcomes are most likely. Crisis intervention may mean both physical and emotional support (Greenstone & Leviton, 2002) and “focuses on helping people in crisis recognize and correct temporary affective, behavioral, and cognitive distortions brought on by traumatic events” (James & Gilliland, 2001, p. 9). This type of crisis intervention is an essential component to be included in school crisis management plans.
School Crisis Intervention

School crisis intervention has improved dramatically over the years. In Chowchilla, California, in the 1970s, a bus full of schoolchildren was kidnapped. After their rescue and release, no intervention by either the school or a mental health agency was provided. A study of the same children five years later found that 100 percent of them had clinical symptoms of depression, fear or anxiety (Terr, 1983). In sharp contrast to the handling of this event, many schools are currently working to establish crisis plans that include crisis intervention services provided at school. Schools are now doing more than simply counting on the resilience of children. They are often including the recommendations of the National Institutes of Mental Health (Poland, 1994) in their crisis intervention strategies: encouraging crisis intervention staff to seek out children who need help, providing opportunities to express emotions and permission for a range of emotions, and providing information to parents regarding child reactions to crisis, with specific suggestions about how to help.

As several authors point out, schools are seeing more and more their responsibility in school crisis intervention and are also being held liable more frequently (Poland, 1994; King, Price, Telljohann, & Wahl, 1999). There have been numerous cases in which parents sued schools after crises; indeed, Poland and McCormick (1999) describe the inevitability of litigation following a large-scale school crisis if the school failed to prevent the crisis or did not respond appropriately. For example, in Kelson v. City of Springfield (1985), a student brought a gun to school and demanded money from a teacher. He then went with the teacher to a room where an assistant principal was waiting. He put the gun in the waistband of his pants and showed the staff members a note stating his intent to commit suicide. He asked to see his school counselor (his request was refused). A police officer also spoke with the student. After another few minutes
with the assistant principal, the student went to the restroom (still in possession of the gun) where he shot himself. He died later that day. His parents sued the school system, which settled out of court. Kelson was the first case "in which the court permitted a lawsuit when there was no intentional act to harm the child on the part of school district employees but the child's death could be linked to the inadequate training of district employees" (Davis & Sandoval, 1991, p. 174). In recent years, school systems have become more frequent targets for legal action when “they do not follow best practice and there are negative outcomes for children" (Brock et al., 1996, p. 42). Schools that do not follow best practices are at risk of being held liable for negligence.

As a result of a perceived increase in school crises and the increasing trend toward litigation in our society many states have set forth specific requirements for schools regarding crisis response. For example, during 1999, the following states took legal action requiring schools to develop crisis plans or address school safety issues: Alaska, Arkansas, California, Colorado, Connecticut, Illinois, Kansas, Louisiana, Maine, Michigan, Mississippi, Ohio, South Dakota, Tennessee, Texas, and Virginia (Russo, 2000). The states of Indiana and Kentucky have established training programs for school crisis or safety "specialists."

Despite the recent increase in attention to school crisis, there has been little empirical research in school crisis response. Little data have been collected regarding crisis and school personnel or students. Advances in the field have typically been the result of participants’ practical experiences and reporting of what was successful and what was unsuccessful (Poland, 1994).

Lazzara (1999) recently conducted a survey of crisis response in Michigan schools. Principals in 238 schools completed the survey. The majority (86%) of schools reported having
crisis plans in place. The most frequent crisis experienced was student death due to illness or accident, followed by staff death. Most school crisis teams (46.6%) were made up of school personnel, district personnel and community agency personnel and most schools were satisfied with the effectiveness of their plans. It should be noted that the study collected information from principals, so there is an absence of information from other school personnel such as teachers and counselors, who may have differing levels of knowledge about their school crisis plans and may have differing opinions regarding their effectiveness.

Another study, completed by Shafombabi (1999), examined school based crisis response in five counties in Pennsylvania. The researcher utilized a survey and focus groups to investigate whether 87 high schools had crisis teams and crisis plans in place. Of the 56 schools that responded to the survey, 41 had written crisis plans and 36 had crisis response teams. The researcher also asked whether schools formed the plans and teams as the result of crises and how they integrated crisis intervention into normal school procedures. Shafombabi found that 85% of the schools were not engaging in any form of crisis practice drills, only 4% were working to include crisis intervention in their curriculums, and the most frequent impetus for crisis response planning was experiencing a crisis for which the school was unprepared.

Christensen (2001) completed a survey of Nebraska elementary school principals regarding the importance of crisis management plans. Of the 188 principals who completed the survey, 91% reported that their school had written policies for crisis management. In addition, large percentages reported that their school staffs could identify early crisis warning signs: social withdrawal (90%), isolation (86%), being a victim of violence (83%), low academic performance and low social interest (95%), violence (95%), anger (94%), drug abuse (72%) and discipline problems (96%). The study did not determine who on the staff is responsible for making these
identifications or for conducting interventions. Like Lazzara's (1999) study, this study collected information from administrators only. Different staff members may have differing perceptions regarding crisis response plans and recognizing early warning signs.

Role of School Counselors in Crisis Intervention

The role of the school counselor has historically been defined by changes in society, federal legislation, funding, and the impact of current leaders of the profession (Kuranz, 2002). In a recent article in *Professional School Counseling*, Borders described the current state of school counseling as follows: “School counselors are frontline mental health professionals for students and families, who present the gamut from normal developmental issues to serious dysfunctional problems, and often they are the only mental health professional these students and families will see" (Borders, 2002, p.184). Currently, the leaders of the profession promote comprehensive developmental programming that will serve to prevent problems and smooth the progress of learning, with the focus less on intervening with individual crises and more on prevention that reaches every student (Gysbers, 2001).

Crisis intervention is considered to be a secondary prevention activity, working to prevent the development of further problems resulting from trauma. Successful coping with crisis situations can prevent psychopathology (Caplan, 1964). A program could not be considered to be truly comprehensive without including crisis intervention as a component. Several authors have addressed this issue. Crisis intervention services are necessary for the continued functioning of the instructional program because they assist in re-establishing stability in the school (Aronin, 1996). Adelman and Taylor (2001) state that in comprehensive guidance programs, crisis intervention is one of the six clusters of activities school counselors should use to facilitate learning. In their article discussing the mental health counseling role of school
counselors, Lockhart and Keys (1998) list individual crisis intervention and large group crisis intervention as two of several required skills in order for counselors to be prepared for the range of issues that present in schools.

Counselors have historically been responsible for crisis intervention (Jaksec, 1996), are expected to be qualified for crisis intervention, and are likely to be the staff members responsible for taking the lead regarding the psychological aspects of crisis intervention after a crisis event occurs (Petersen & Straub, 1992; Gallagher & Coy, 1998; Fitch, et al., 2001). This view of the school counselor's crisis intervention role is supported by the ASCA position statement regarding the school counselor's role in critical incident response. ASCA states that the school counselor is a "leader and crucial member" (p. 2) of the crisis team, should provide input in critical incident response plans, and should provide critical incident stress debriefing for students, staff and counselors (American School Counselor Association, 2000). No data could be located regarding whether school counselors have the training required to participate effectively in school crisis planning and response or to conduct critical incident stress debriefing.

Francisco and Fasko (1999) conducted a study of the role of school counselors in crisis response. A phone survey was used to question 35 high school counselors from 23 counties in eastern Kentucky. Three of the counselors reported that they had not dealt with a crisis in their schools. Only 3 counselors indicated they would feel uncomfortable counseling students in a crisis situation. Twenty-four of the counselors stated that they play an important role in crisis intervention in their schools. Ten of the counselors reported being in charge of the crisis intervention plan for their school. Twenty-seven of them reported that the counselor is a member of the school crisis team.
As previously described, the current self-reported role and function of school counselors includes crisis intervention. In a study of the functions of 162 school counselors in the Northern Virginia area, counselors reported that they spend 8% of their time in crisis intervention and mediation (ter Maat, 2000). In a study of the roles, functions and training needs of school counselors conducted by Ballard (1995), crisis intervention counseling emerged as one of the three major roles reported by school counselors. The researcher surveyed 324 public school counselors serving grades pre-kindergarten through 12 in the state of Louisiana. The results of the Louisiana survey were compared with the results of the Oregon School Counselor Study conducted in 1992 by the Oregon State System of Higher Education. Ballard found that counselors in both states share similar role and function definitions. The major roles reported by both groups are developmental counseling, crisis intervention counseling, and college and career counseling. Clearly, school counselors are expected to take a leading role in crisis intervention in schools and, by their own reports, spend a considerable amount of their time involved in crisis intervention activities.

Crisis Intervention Training

Training in counseling alone is not adequate for effective crisis intervention. Providing appropriate intervention in a crisis situation requires knowledge of crisis theory, crisis assessment and psychological first aid (Greenstone & Leviton, 2002; James & Gilliland, 2001). Several authors in the crisis intervention field have stated the importance of specific training in crisis intervention skills (Greenstone & Leviton, 2002; Johnson, 2000; Myer, 2001; Pitcher & Poland, 1992; Schonfeld & Newgass, 2000). In addition, several authors (e.g., Brock, et al., 1996; Johnson, 2000) agree, that school staff members, who are most knowledgeable about their school and its population and known by students and staff, should provide the majority of school
crisis intervention. This suggests the need for training of school staff members in specific crisis intervention skills. Authors also agree that all school staff members who have contact with students should have training in crisis intervention (Marotta, 2000; Pitcher & Poland, 1992; Young, Poland, & Griffin, 1996).

In terms of school counselor training, authors have emphasized that training in specific skills is important for school counselors. Riley and McDaniel (2000) state the importance of training for school counselors regarding specific aspects of their roles, including violence prevention, intervention, and crisis response. Crisis intervention would surely fall under Paisley and McMahon’s (2001) recommendation that school counselors pursue professional development related to specific skills needed in their jobs. School counselors, given the opportunity, have expressed their crisis intervention training needs – school counselors in Louisiana expressed “some to moderate need” (Ballard, 1995, p. 108) for training in two areas of crisis intervention: counseling on child abuse and counseling on suicide. Lichtenstein, Schonfeld and Kline (1994), in their work training regional, district and school level crisis teams with the Yale Child Study Center were asked by participants to provide follow-up training that was more specialized, such as counseling techniques for use with students in crisis. These crisis teams were made up of school and community agency members, including school counselors and other school personnel.

A few studies have been published regarding school crisis intervention training, mostly focusing on teachers and school psychologists. Authors in the school psychology field have stressed the importance of crisis intervention, both in terms of the appropriateness of their involvement due to preparation programs (Poland, 1994) and in terms of making school psychology services an integral part of the school program, moving away from the perception of
the school psychologist as a staff member who only performs testing or other auxiliary functions (Young et al., 1996). As an apparent result of this impetus to make a shift in the role of school psychologists, some studies relating to crisis intervention have been conducted and are described below. The term school counselor is noticeably absent from most recent school crisis intervention publications written by school psychologists. It is possible that the emphasis on changing the role of the school psychologist has led to the omission of school counselors as personnel mentioned when referring to school crisis teams, training, and recommendations for crisis response.

The school counseling literature is sorely lacking in publications related to crisis intervention. For example, Perusse, Goodnough, and Noel (2001) describe a recent national survey of school counselor preparation programs. The study compared 189 counselor preparation programs in terms of credit hours, screening methods for acceptance, faculty school counseling experience, course content and fieldwork requirements. The core areas addressed in the CACREP standards are addressed in the survey and the results. In addition, several specialized content areas for school counseling were studied, including play therapy, school law, youth at risk, and parent education. Surprisingly, neither researchers nor participants mentioned crisis intervention.

Tabasso (2001) surveyed 166 school psychologists who attended a state school psychology conference in Florida in 1998 regarding their perceived crisis intervention training needs. The findings reveal that only 9% of participants had completed a full course in crisis intervention, but 70% of them thought this training would be very important to include in a graduate program curriculum (increasing to 93% when adding respondents who said it would be moderately important to include). The author had expected to find a much higher level of
training among psychologists and expressed concerns regarding the lack of training, especially after several years of having emphasis on crisis intervention among school psychologists. The study also assessed the preparedness for seven specific crisis situations and found that school psychologists felt most prepared for suicidal ideation/gestures and least prepared for rape. There was no difference in the findings based on whether the psychologists worked at the elementary, middle or high school level. The study has implications for school counselors, who may also be inadequately trained for crisis intervention. A similar study has not been conducted using school counselors as subjects. The current study addressed this lack of information by collecting data exclusively from school counselors regarding their crisis intervention experiences, training, and training needs.

In the Francisco and Fasko (1999) study discussed previously, researchers also asked counselors about crisis intervention training. Of the thirty-five respondents, four stated they needed more training in crisis intervention. Twenty-five of the counselors had completed some crisis intervention training. Thirty-two of them would like to attend additional crisis intervention training. All of the counselors recommended that teachers and administrators be trained in crisis intervention.

One recently published study of school counselors and crisis intervention is related to suicide. Researchers used a random sample of 186 high school counselors who were members of the American School Counselor Association. They assessed the counselors' perceived self-efficacy in recognizing students at risk for suicide (King et al., 1999). In the study, 87% of counselors reported that they believed it was their role to identify students at risk for suicide, but only 38% believed they could do so. The study also found that working in a school with a crisis team was associated with higher self-efficacy regarding suicide intervention. The authors state
the need for counselor education programs to include focus on preparing school counselors for suicide prevention and intervention. This recommendation is supported by the fact that most states require school personnel to report statements of suicidal intent to parents/guardians and/or local authorities. The State Board of Education in Virginia, for example, as a result of legislation passed after the completed suicide of a student, has outlined exact procedures to be followed in the event that school personnel become aware of statements of suicidal intent on the part of students (Board of Education, Commonwealth of Virginia, 1999).

Taylor, Hawkins and Brady (1991) conducted a study regarding teachers' crisis intervention training. They recruited a sample from graduate level education courses at a major Southwestern university and found that, while teachers are increasingly being expected to perform crisis intervention in their jobs, few of them receive coursework in crisis intervention as part of their training (only 8 of 115 participants). Slightly more than half (56%) of participants had received some training in crisis intervention: 11% had received inservice training, 24% had attended a workshop/seminar, and 8% reported training in multiple formats. Teachers were asked to report their self-efficacy in recognizing the need for and delivering crisis intervention services on a Likert scale ranging from 1 (Not confident at all) to 5 (Very confident). Trained teachers in the study had significantly higher self-efficacy than untrained teachers in regard to their ability to recognize the need for and perform crisis intervention. In addition, teachers in the study were asked their preference for the focus of future crisis intervention training. Teachers indicated (83%) that they would prefer training that teaches them to identify behavior changes that indicate a need for crisis intervention rather than knowledge of life event stressors. They also found that self-efficacy in crisis intervention improved with short-term training. These findings reinforce
the idea that school personnel are being asked to perform crisis intervention for which they have not been trained and that training can make a difference in their perceptions of self-efficacy.

Eldred (1996) conducted a study of the effects of crisis team training on coping, anxiety and preparedness for school violence. Utilizing a pre- and post-test measure on intact groups of school personnel receiving inservice training, she found that there was no significant difference in coping between the trained and untrained groups following a crisis simulation experience. Another finding was that there was no significant difference in knowledge between trained and untrained groups following a simulation. A significant difference did exist, however, relating to anxiety. The untrained group had a significantly higher level of anxiety than the trained group prior to a simulation. It is important to consider that the training involved was inservice provided by a school district, which could have impacted participants' anxiety levels. In addition, coping, anxiety and knowledge could have been impacted by the simulation topic (violence) or the fact that participants were aware that they were participating in a simulation and not a real crisis.

Several topics have been noted to be important components of crisis intervention training and will be used for creating the instrument for this study. The following list of topics was created based on review of crisis related resources:

(1) crisis theory (Johnson, 2000; Pitcher & Poland, 1992)
(2) psychological first aid, (Brock, et al., 1996, Eldred, 1995; James & Gilliland, 1997; Johnson, 2000),
(3) assessment and referral (Eldred, 1995; James & Gilliland, 1997; Johnson, 2000; Pitcher & Poland, 1992),
(4) age specific responses of children/effects of trauma on children (Brock, et al., 1996; Eldred, 1995; Greenstone & Leviton, 2002; Johnson, 2000),
(5) stages of grief and grief reactions based on developmental stage (Eldred, 1995; Johnson, 2000; Greenstone & Leviton, 2002; James & Gilliland, 1997; Pitcher & Poland, 1992),
(6) Post Traumatic Stress Disorder (Eldred, 1995; James & Gilliland, 1997; Johnson, 2000),
(7) critical incident stress debriefing (Brock, et al., 1996; Greenstone & Leviton, 2002; James & Gilliland, 1997; Johnson, 2000),
(8) responding to violence (Eldred, 1995; James & Gilliland, 1997; Johnson, 2000),
(9) suicide prevention and intervention, including lethality assessment (Brock, et al., 1996; James & Gilliland, 1997; Johnson, 2000; Pitcher & Poland, 1992),
(10) responding to disaster (Johnson, 2000), and
In addition to this list, authors have stated that it is important to include experiential components such as crisis enactments and drills in training programs for school personnel (e.g., Pitcher & Poland, 1992; J. L. Greenstone, personal communication, January 8, 2002).

Summary

Chapter two began with an introduction to crisis intervention theory, providing knowledge regarding the history of the field and the basic concepts of crisis intervention. Next, the history and current state of school crisis intervention was described, including recent research on school crisis response. The role of school counselors in crisis intervention was discussed, documenting several studies in which crisis related functions of school counselors have been specified. The chapter ended with a short description of the important components of crisis intervention training and discussion of studies related to school crisis training.
Chapter Three: Methodology

The goal of this exploratory study was to gather accurate information regarding crisis intervention experiences, preparedness, training, and training needs of school counselors in the United States who use the Internet and volunteered to complete the survey. The results of the study add important knowledge to the fields of school counseling and school crisis intervention by addressing a topic that has previously been only minimally explored. In addition, the study may provide important learning regarding school counselors' participation in Internet research.

Web-based Survey Research

As discussed in chapter one, Internet-based research is becoming more common. Authors have listed the advantages of Web research and the expansion of its use for survey and questionnaire based research as well as increasing use of the Web for experimental studies (Duffy, 2002). Harris and Dersch (1999) discuss the trend away from using quasi-experimental research designs and toward the use of less rigidly structured projects in addressing social questions. They mention the usefulness of the Internet in "broadening our concept of research as well as the way research is conducted" (p. 9). While Web research is still in its beginning stages, research is being conducted on using the Internet for scholarly studies. Authors have written about the advantages and disadvantages of using Web-based research methods. For the purposes of this study, I have narrowed the discussion to that related specifically to Web-based surveys.

Web-based and mail survey methodologies were recently compared in a study completed by Truell, Bartlett, & Alexander (2002). The researchers randomly assigned members of their sample to two groups. One group received a mail survey and the other received an e-mail note that included a hyperlink to the web version of the survey. Of the 306 surveys distributed, 159 were returned. Of those returned surveys, 78 were web surveys and 81 were mail surveys.
Comparisons were made between the two groups on response rates, response speed, and response completeness. There was no significant difference in response rates for the two groups, the Internet-based survey was significantly faster than the mail survey, and the response completeness for the web survey was significantly higher than that of the mail survey. The results of this study indicate that equal response rates, faster return speed, and higher response completeness are possible advantages of using web-based technology for survey distribution.

Authors note several advantages in using Web surveys over regular mail surveys:

(1) Web surveys access larger numbers of potential participants (Lazar & Preece, 1999);
(2) the data collection period for Web surveys is considerably less than for mail surveys due to the elimination of mail out and return mail time and due to the faster nature of the Internet communication medium (Watt, 1997; Farmer, 1998; Truell et al., 2002);
(3) the cost Web surveys is significantly less than other survey methods (Watt, 1997; Lazar & Preece, 1999; Duffy, 2002);
(4) data entry problems are decreased due to the fact that many survey programs compile data automatically when it is submitted, thereby eliminating the chance of human error during the data-entry process as well as saving considerable amounts of time for researchers (Lazar & Preece, 1999; Duffy, 2002); and
(5) participants have a greater sense of anonymity in Web-based research and may answer more freely than in other research projects (Harris & Dersch, 1999).
In addition to the advantages of Web research, authors have also discussed some disadvantages:

(1) typical users of the World Wide Web are white males, averaging 37.6 years old, most of whom are college educated and access the Internet daily from home or work and are not representative of the typical citizen of the United States (Duffy, 2002);

(2) sampling for Web surveys is problematic in populations for which there is no listing of members and/or members' email addresses and for which it is impossible to determine whether members have Internet access (Duffy, 2002);

(3) the anonymity provided by Web surveys could encourage people to falsify information provided without concern for consequences (Harris & Dersh, 1999);

(4) issues of informed consent and confidentiality are difficult to address in Web research because the technology exists to access any information that is on the Internet and because informed consent can not be obtained via written signature on a Web-based survey (Duffy, 2002); and

(5) validity of the results can be affected by multiple completions or by people who happen to find the survey and complete it "for fun" or those in the sample who do not take the project seriously (Duffy, 2002).

Several aspects of the design of this study addressed these limitations of Web research and are discussed in the appropriate sections of this chapter.

Participants

The survey population for this study consisted of self-identified school counselors in the United States who use the Internet. Participants in the study were recruited from practicing school counselors in the United States who indicated that they work in grades K-12 and who use
e-mail and the Internet. Although no source could be located that provides a complete list or an exact count of school counselors in the United States, the National Center for Education Statistics (NCES) reported that 93,058 guidance counselors were employed in public school systems in 1998 (U.S. Department of Education, 2000). In addition, NCES reported that in the year 2000, 98% of public schools had Internet access (U.S. Department of Education, 2001), indicating a strong likelihood that school counselors have the means to participate in the survey. As discussed in chapter one, Sabella (2000) states that school counselors in many areas of the United States have the necessary equipment and skills to conduct computer conferencing, use e-mail, utilize multimedia software, develop databases, and access the Internet. In their study of computer utilization by Kentucky school counselors, Owen and Weikel (1999) found that 88 percent of school counselors had been assigned a computer to support the counseling program and 97.8 percent had access to a computer at work. Another finding was that 28.9 percent of respondents use computers for email and 13.3 percent use computers for Internet research. While restricted to responses in only one state, these findings indicate that a substantial number of school counselors have interest and access to the means necessary to participate in this study. In addition, it is safe to assume that these numbers have increased over the past three years due to the rapid growth of Internet technology.

No source could be located from which to draw a random sample of email addresses for school counselors. The American School Counselor Association was contacted and asked to provide a sample of email addresses for members. Although the organization does have email addresses for some members, ASCA will provide names and postal addresses, but not email addresses. In addition, many of their members have not provided email addresses. Therefore, a non-probability Internet sample was drawn for the study. The sample is classified as a recruited
sample, a method used for increasing the representativeness of a sample by exercising some control over who participates in a study. This method consists of targeting specific groups and recruiting people from those groups (Watt, 1997). The targeted groups for this study were members of counseling-related listservs and state school counseling associations. Participants were recruited by posting information regarding the upcoming study on the following counseling related listservs (e-mail lists): the American Counseling Association's monthly email newsletter; the American School Counselor Association's elementary, middle, high, and general lists; the Counseling Interest Network list; and personal contacts of state school counseling association leaders through email addresses obtained from the ASCA web site. These postings and notes (see Appendix A for the study announcement) contained the email address of the researcher and instructions for expressing interest in participating in the study. Respondents' email addresses were added to a confidential email list (listserv) for the survey. The listserv program was set up to send an automatic welcome message (written by the researcher, see Appendix A) to each member of the list as they were added to the list by the researcher. This welcome message contained the guidelines for participation, stated the expected time to be required, and encouraged participants to forward the survey announcement to other counselors who might be interested in participating in the study. Volunteers were added to the list as they contacted the researcher until the last two days of data collection. Prior to analysis, the responses were screened using a process called sifting (Farmer, 1998). Sifting serves to increase the representativeness of the sample by removing any respondents who do not meet criteria for participation. Demographic information collected in the survey was used to determine whether participants were school counselors as defined for this study. Respondents who indicated that they work in the United States and that they are K-12 school counselors who possess certificates
in school counseling conferred by their states' Departments of Education were included in the
data analysis. In addition to addressing the research questions, this methodology provides some
information regarding the demographics of school counselors who are using Internet technology.

Although this sample is not statistically generalizable to school counselors as a group, it
does provide information from over five hundred school counselors in different settings around
the country. This enables interested parties and researchers to explore important issues related to
crisis intervention and crisis intervention training for school counselors and provides direction
for future study in the area.

The email list of volunteers was the sample for the survey. The completed sample was all
the counselors who completed the survey. Participants were required to enter the email address
they used to contact the researcher as part of the survey. This procedure enabled the researcher to
check for multiple submissions and for submissions by people who were not listed as study
participants. This method also allowed the researcher to assess the number of counselors who
expressed interest in participating and then determine the response rate based on the number of
counselors who actually completed the survey.

Confidentiality and Informed Consent

The study was approved as "Exempt from Informed Consent" by the Institutional Review
Board of Virginia Tech on May 10, 2002. The survey participant email list was confidential.
Email addresses of members of the list were available only to the researcher/list owner. In this
way, it was possible to send one email note that was received by many participants without
revealing the names and contact information of anyone other than the researcher. In addition,
data is reported only in aggregate or anecdotal form. Identifying information about participants is
not revealed in reporting the results.
Other risks to confidentiality were those inherent in normal use of email and Internet technologies. It is possible that information transmitted through these technologies can be intercepted and read by a third party. The likelihood of this is minimal; however, participants were informed of this risk on the entry section of the survey page.

Delimitations and Limitations

This study was exploratory in nature, providing information regarding crisis intervention experiences, preparedness, training, and training needs of participating school counselors. It assumed that information provided by the participants is true and that participants who identified themselves as school counselors are actually school counselors. One delimitation is that the sample was limited to counselors who use the internet/email and volunteered to participate. Data was not collected from counselors who did not receive notification of the study, who had no interest in responding to a survey about crisis intervention, or who do not utilize electronic communication methods. It is possible that counselors with minimal experience in crisis intervention due to age, experience, or location did not respond to the survey. It is also possible that lack of experience with technology and comfort level with using the Internet discouraged some counselors from responding. Conversely, counselors who are enthusiastic about technology and/or have a strong interest in crisis intervention were likely to respond. This may have created bias in the results.

Another delimitation is that data collection for the study was limited to three weeks and therefore collected information only from counselors who responded within the time limit. The delimitation of a three-week collection period was based on support in the literature for quick responses to electronic surveys.
Research Questions

The study was designed to: (a) assess whether participating practicing school counselors have training in crisis intervention skills, (b) gather information regarding the situational crises they have faced in their jobs, (c) determine their self-reported training needs related to crisis intervention, and (d) examine the relationship between their training in crisis intervention skills and their perceptions of being prepared for crisis situations. In order to accomplish these goals, the following research questions were used:

1. Do participating practicing school counselors have training in situational crisis intervention skills?
2. What is the format and source of this training?
3. What situational crises have these school counselors faced in their work?
4. Do these school counselors feel adequately prepared for crisis situations?
5. Do these school counselors differ in their perceptions of preparedness according to demographic variables (school grade level, school setting, location, training received, years of experience, gender, ethnicity, ASCA membership)?
6. What additional training regarding crisis intervention do these school counselors believe they need?

In addressing the research questions, one hypothesis was tested. It is commonly assumed that training leads to competence and often confidence in any given area. For this study, the assumption that counselors who have received training in crisis intervention would describe themselves as more prepared for crisis situations as a result of their training was tested using the following research hypothesis:
Counselors who have higher levels of training in crisis intervention will report higher levels of preparedness for crisis intervention.

Instrumentation

The survey instrument (see Appendix B) was created based on the review of the literature; phone and/or email consultation with three crisis intervention experts: Dr. Dr. Richard James, a co-author of the book, "Crisis Intervention Strategies" and professor of counselor education at Memphis State University, Dr. David J. Schonfeld, M.D. of the Yale Child Study Center, and Dr. James L. Greenstone, co-author of "Elements of Crisis Intervention," diplomate of the American Board of Examiners in Crisis Intervention, and a police psychologist with the City of Forth Worth, Texas Police Department who provides consultation and conducts training for the department's peer crisis intervention teams; and a pilot study involving five school counselors from three local school systems, Roanoke City Public Schools, Montgomery County Public Schools and Radford City Public Schools, all located in Virginia.

Principles of web-survey design from Dillman's (2000) tailored design method were utilized. According to Dillman, construction of web-surveys requires a combination of questionnaire logic and computer logic, thus creating the need for special instructions for subjects in using the technology involved and for additional attention to the layout of the survey. Web surveys must be designed with the assumption that people completing the survey have only basic computer skills and must therefore be simple to complete and clearly explained. Harris and Dersch (1999) describe the importance of designing Web surveys for the "thin client," that is, users who have minimum skills for using the technology and who do not have access to the latest, most advanced software and hardware. Dillman also recommends using traditional question formats and keeping all the questions on one page, allowing subjects to scroll through
the survey. Computer software differences are an issue in web-based research. These issues were addressed through the use of Virginia Tech's SurveyMaker program, which has been demonstrated to work with all web browser programs, both older and more recent versions.

The pilot study was designed to examine the survey instrument for clarity and relevance and to obtain an accurate estimate of the time required to complete the survey. As a result of the pilot study, some minor editing changes were made to the survey to make it more "readable." In addition, the survey was found to take approximately 20 minutes to complete, valuable information that was presented to study participants in order to prepare them for the time commitment required. Participants were given opportunities with several questions and at the end of the survey to add any additional comments or information they chose.

Data Collection Procedures

A pre-notice e-mail note was sent to volunteers a few days before the study began to remind them that they had expressed interest in participating (see Appendix C for the pre-notice, notice, reminders and closing information). E-mail notification was sent to all interested respondents on the list when the survey was ready for data collection. The notification contained a web site address, a link directly to the site, and instructions for accessing the survey. Participants used their web browser programs to access the survey page and complete the survey. When they finished entering information, they clicked on a "submit" button. The SurveyMaker program collected the data. At the end of the study data was downloaded from the SurveyMaker site into a Microsoft Excel worksheet. The data was then modified as necessary and transferred to a Statistical Package for the Social Sciences (SPSS) data file.

Data collection for the study was limited to three weeks (beginning June 4, 2002 and ending June 25, 2002) and therefore involved information only from counselors who responded
within the time limit. Participants received four contacts regarding the study, based on the procedure recommended by Dillman (2000). Truell, Bartlett, & Alexander (2002) suggest that a shorter time frame for follow-up contacts might be useful for Internet-based surveys. Following is the schedule that was planned for contacting participants:

(1) The first contact was the prenotice letter, alerting list members that the survey would be available in a few days.

(2) The second contact was the survey mailout notice, alerting members that the survey was open for data collection and providing access information.

(3) The third contact was sent one week after data collection began. It included thanks to participants who had completed the survey and a reminder to the list members who had not completed the survey.

(4) The fourth contact contained a reminder notice for those who had not completed the survey and a thank you to those who had completed it (along with an explanation that if they had already completed the survey, they need do nothing more).

(5) The fifth and final contact was a note of appreciation for participating and notification that data collection for the survey had ended.

During the study, the researcher determined that making five contacts was unnecessary due to the large number of survey completions and the large number of responses to notes sent to the list. Therefore, the fourth and fifth contacts were combined into one, making the final contact a reminder, thank you, and announcement of the closing of the survey.
Data Analysis

In the first stage of the analysis, univariate descriptive statistics were calculated. These descriptive statistics provide information that assists in answering research questions one, two, three, four, and six. Descriptive statistics are reported in tables and graphs.

The second stage of data analysis consisted of multiple regression analysis. The analyses examined relationships among the variables and answered research question number five. Demographic variables were used as independent variables with level of preparedness as the dependent variable. Correlations, regression coefficients (b), standardized regression coefficients (Beta) and R² values are reported in tables.

The third stage of data analysis addressed the research hypothesis: Counselors who have higher levels of training in crisis intervention will report higher levels of preparedness for crisis intervention. Simple analysis of variance was used to compare the means of the groups (based on level of training) on their levels of preparedness for crises.

Summary

Chapter three outlines the method for conducting the study. First, a discussion of Web-based research is included. Next, the sample and procedures for recruiting participants are described. Discussion of the survey instrument design follows, including the principles of Dillman's (2000) tailored design method. The next section outlines data collection procedures utilizing email and the online survey form and listing the multiple contacts that were used. The last section delineates the data analysis procedures that were used for the study. Procedures for addressing the limitations of Web-based research are included throughout the chapter.
Chapter Four: Results

This exploratory study gathered data regarding crisis intervention experiences, preparedness, training, and training needs of school counselors in the United States who use the Internet and volunteered to complete the survey. This chapter reports the results of the study, beginning with a summary of demographic information about the study participants. Results are then presented in answer to each of the research questions. Each answer presents analyses conducted and interpretations.

Demographics

As discussed in chapter three, the survey population for this study consisted of participants who were recruited from practicing school counselors who use e-mail and the Internet. Although no source could be located that provides an up-to-date list or an exact count of school counselors in the United States, the National Center for Education Statistics (NCES) reported that 93,058 guidance counselors were employed in public school systems in 1998 (U.S. Department of Education, 2000).

Participants were recruited as described in chapter three, via an e-mail announcement (see Appendix A) sent to the American Counseling Association's monthly email newsletter; the American School Counselor Association's elementary, middle, high, and general e-mail lists; the Counseling Interest Network list; and personal contacts of state school counseling association leaders through email addresses obtained from the ASCA web site. In addition, the Virginia School Counselors Association gave permission for the researcher to email its membership list and the American School Counselors Association sent the study announcement to all members on its email list. At the end of the study, the e-mail list for the survey contained addresses for 1091 people who expressed interest and then agreed to participate. The total number of responses
received was 673. Responses were received from 48 states (no responses from North Dakota or Vermont) and Washington, D.C. and from the following areas outside the U.S.: Bermuda, Canada, Department of Defense institutions, Indonesia, Japan, Peru, Puerto Rico, and Singapore.

The e-mail addresses entered by respondents were cross-checked with the participant list to ensure that only responses of people who had contacted the researcher and received the guidelines for participation were included in the results. This cross-check resulted in the elimination of 11 entries for which no corresponding address was contained in the list and 32 entries for which no e-mail address was included. Three double entries were also removed. Two entries listed e-mail addresses but did not answer the survey questions and so were removed. Finally, responses were sifted (the procedure described in chapter three) by using answers to the questions regarding job title, state certification, and location to choose respondents who indicated their job title is school counselor/guidance counselor, who work with grades K-12, who are certified by their states' Departments of Education, and who work in the United States (including Washington, D.C.) for inclusion in the final data set. Upon examination of the remaining 518 entries, one entry was determined to be an outlier. This entry's responses to question number one ranged from 0 incidents to 12, except for one situation for which the respondent entered several hundred. The highest entry for that situation from remaining respondents was 40. Due to the extreme nature of the entry, it was removed, leaving a total of 517 entries for analysis. Entries with occasional answers missing were included in the analysis. A response rate of 47% was determined based on the 1091 volunteers who received the survey and the 517 respondents included in the final data set.

Questions three through 13 of the survey were used to collect demographic information. Questions three, four, and six were used to sift the responses prior to beginning the analyses.
Following are the frequencies for each demographic variable. Survey question number 11 asked that respondents enter their ages. The mean age of participants is 44.01 years, with a standard deviation of 10.13. The mode age is 51. Respondents between the ages of 30 and 59 make up 87.2% of the group. Ages ranged from 24 to 67. In preparation for further analyses, ages were divided into groups based on decade. Table 1 and Graph 1 show the distribution of ages.

<table>
<thead>
<tr>
<th>Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 24-29</td>
<td>48</td>
<td>9.3</td>
</tr>
<tr>
<td>Ages 30-39</td>
<td>128</td>
<td>24.8</td>
</tr>
<tr>
<td>Ages 40-49</td>
<td>146</td>
<td>28.2</td>
</tr>
<tr>
<td>Ages 50-59</td>
<td>177</td>
<td>34.2</td>
</tr>
<tr>
<td>Ages 60-67</td>
<td>16</td>
<td>3.1</td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 1 Age Distribution
In survey question number five, participants were asked to enter their years of experience in one of five categories. The majority of respondents (n=244) have 1-5 years of experience as a school counselor. Table 2 and Graph 2 show the frequencies for years of experience.

Table 2 Years of Experience

<table>
<thead>
<tr>
<th>Years</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>244</td>
<td>47.2</td>
</tr>
<tr>
<td>6-10 years</td>
<td>100</td>
<td>19.3</td>
</tr>
<tr>
<td>11-15 years</td>
<td>83</td>
<td>16.1</td>
</tr>
<tr>
<td>16-20 years</td>
<td>46</td>
<td>8.9</td>
</tr>
<tr>
<td>20+ years</td>
<td>43</td>
<td>8.3</td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 2 Years of Experience

![Graph 2: Years of Experience](image)
Survey question ten requested that respondents indicate their genders. The majority of participants are female (83%, n=431), as shown in Table 3 and Graph 3.

Table 3 Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>431</td>
<td>83.4</td>
</tr>
<tr>
<td>Male</td>
<td>81</td>
<td>15.7</td>
</tr>
<tr>
<td>No answer</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 3 Gender

Survey question 12 inquired about ethnicity. The majority of participants (n=468) are Caucasian. Because the frequencies for the other ethnic groups are small, the ethnicity variable was combined for further analyses, resulting in two categories: Caucasian (n=468) and Other (n=49). Table 4 and Graph 4 show the make-up of the group in terms of ethnicity.
Table 4 Ethnicity

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>468</td>
<td>90.5</td>
</tr>
<tr>
<td>Other</td>
<td>49</td>
<td>9.5</td>
</tr>
<tr>
<td>African American</td>
<td>18</td>
<td>3.5</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16</td>
<td>3.1</td>
</tr>
<tr>
<td>Other</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>2</td>
<td>0.4</td>
</tr>
<tr>
<td>Native American</td>
<td>1</td>
<td>0.2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>517</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Graph 4 Ethnicity

Respondents were asked in survey question eight to indicate the type of their school. The majority (96%, n=497) work in public schools; frequencies are shown in Table 5 and Graph 5.
Table 5 School Type

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>497</td>
<td>96.1</td>
</tr>
<tr>
<td>Private</td>
<td>15</td>
<td>2.9</td>
</tr>
<tr>
<td>Other or Missing</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 5 School Type

Question seven inquired about the setting of respondents' schools. The highest number of responses came from counselors who work in suburban settings (n=225) and the least number from those in urban settings (n=103). Table 6 and Graph 6 show the frequencies for setting.
Table 6 Setting

<table>
<thead>
<tr>
<th>Setting</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suburban</td>
<td>225</td>
<td>43.5</td>
</tr>
<tr>
<td>Rural</td>
<td>186</td>
<td>36.0</td>
</tr>
<tr>
<td>Urban</td>
<td>103</td>
<td>19.9</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 6 Setting

Question nine asked respondents to report the grade levels with which they work. Most respondents work at the elementary level (n=176, 34%), followed by high (n=156, 30.2%), middle (n=112, 21.7%), and combined levels (n=64, 12.4%). Nine respondents did not answer. Table 7 and Graph 7 show the frequencies for level.
**Table 7 Levels**

<table>
<thead>
<tr>
<th>Grade level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>176</td>
<td>34.0</td>
</tr>
<tr>
<td>Middle</td>
<td>112</td>
<td>21.7</td>
</tr>
<tr>
<td>High</td>
<td>156</td>
<td>30.2</td>
</tr>
<tr>
<td>Combined</td>
<td>64</td>
<td>12.4</td>
</tr>
<tr>
<td>Missing</td>
<td>9</td>
<td>1.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>517</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

**Graph 7 Levels**

![Bar Chart showing the distribution of Level frequencies](chart.png)

Survey respondents entered their locations (state) in answer to question 6. After the data-sifting procedure was completed, there were no responses from counselors in Vermont, Washington, D.C. or North Dakota. The greatest numbers of respondents are located in Virginia (n=60), followed by Florida (n=59), Pennsylvania (n=36), California (n=33), and New York
(n=27). The following states had from one to three responses: Alabama, Alaska, Delaware, Hawaii, Iowa, Louisiana, Massachusetts, Mississippi, Montana, Nebraska, New Mexico, Rhode Island, South Dakota, Tennessee, and Wyoming. Because state responses were too few for separate analysis, responses were divided into regions based upon those used by the United States Department of Education's National Assessment of Educational Progress, an assessment program which is nationally representative and conducts continuing assessments of American students' achievement and knowledge in various subject areas (S. Osborne, personal communication, August 14, 2002). Table 8 and Graph 8 show the frequencies and percents for responses by region, with the frequency and percent for each state also delineated.

Table 8 State
Table 8 State (continued)

<table>
<thead>
<tr>
<th>Region</th>
<th>State</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Southeast</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alabama</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td></td>
<td>Arkansas</td>
<td>7</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Florida</td>
<td>59</td>
<td>11.4</td>
</tr>
<tr>
<td></td>
<td>Georgia</td>
<td>15</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Kentucky</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>Louisiana</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Mississippi</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>North Carolina</td>
<td>13</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>South Carolina</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Tennessee</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Virginia</td>
<td>60</td>
<td>11.6</td>
</tr>
<tr>
<td></td>
<td>West Virginia</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Central</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Illinois</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Indiana</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Iowa</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Kansas</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Michigan</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>Minnesota</td>
<td>7</td>
<td>1.4</td>
</tr>
<tr>
<td></td>
<td>Missouri</td>
<td>19</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>Nebraska</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td></td>
<td>North Dakota</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Ohio</td>
<td>14</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>South Dakota</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Wisconsin</td>
<td>7</td>
<td>1.4</td>
</tr>
<tr>
<td>West</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alaska</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Arizona</td>
<td>11</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>California</td>
<td>33</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>Colorado</td>
<td>6</td>
<td>1.2</td>
</tr>
<tr>
<td></td>
<td>Hawaii</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td></td>
<td>Idaho</td>
<td>15</td>
<td>2.9</td>
</tr>
<tr>
<td></td>
<td>Montana</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td></td>
<td>Nevada</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>New Mexico</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td></td>
<td>Oklahoma</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td></td>
<td>Oregon</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td></td>
<td>Texas</td>
<td>11</td>
<td>2.1</td>
</tr>
<tr>
<td></td>
<td>Utah</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td></td>
<td>Washington</td>
<td>12</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>Wyoming</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>517</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>
The final demographic question, number 13, regards membership in the American School Counselor Association. The majority (n=384) of respondents indicated that they are members of ASCA. Table 9 and Graph 9 show the frequencies for ASCA membership.

Table 9 ASCA Membership

<table>
<thead>
<tr>
<th>Membership</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>384</td>
<td>74.3</td>
</tr>
<tr>
<td>No</td>
<td>129</td>
<td>25.0</td>
</tr>
<tr>
<td>No answer</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Survey questions 14 and 15 were used to explore the first two research questions for the study:

(1) Do participating practicing school counselors have training in situational crisis intervention skills?

(2) What is the format and source of this training?

Twenty-nine percent (n=150) of the respondents have taken a graduate level course in crisis intervention. Only 1.5% (n=8) state that they have received no crisis intervention training. The majority of respondents (58%, n=300) report that they have received training in the form of a multiple-day conference/workshop. Table 10 shows the frequencies for level of training in various formats.
Table 10 Level of Training

<table>
<thead>
<tr>
<th>Level of training</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate level course</td>
<td>150</td>
<td>29%</td>
<td>367</td>
<td>71.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Content in course(s)</td>
<td>284</td>
<td>54.9%</td>
<td>233</td>
<td>45.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Multiple days training/conference</td>
<td>300</td>
<td>58%</td>
<td>217</td>
<td>42.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>1 day training</td>
<td>217</td>
<td>42%</td>
<td>300</td>
<td>58.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Inservice less than one day in length</td>
<td>242</td>
<td>46.8%</td>
<td>275</td>
<td>53.2%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>No crisis intervention training</td>
<td>8</td>
<td>1.5%</td>
<td>509</td>
<td>98.5%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Other</td>
<td>21</td>
<td>100%</td>
<td>21</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Crosstabulations were performed in order to examine whether there were differences in level of training according to demographic variables. There were no significant differences in level of training for participating counselors based on grade level, setting, region, gender, or ASCA membership. Significant differences exist based on years of experience, school type, age group and ethnic group. As shown in Table 11 below, for counselors reporting having received no crisis intervention training, those with 16-20 years of experience represent a higher percentage (6.5%) than the other age groups. The percentage (9.4%) of counselors with 1-5 years of experience who reported having multiple days of training is significantly lower than the other groups. For the same experience category, 47.5% report having crisis intervention content in a graduate course, significantly higher than the same category for the other groups. Counselors with 20+ years of experience also report a significantly higher percentage having received multiple days of training. The difference according to school type is due to the large percentage (20%) of counselors in "Other" type schools reporting having received no training. However, this percentage represents only one person and so has little practical significance. The differences among age groups are that for ages 30-39, a significantly smaller percentage (9.4%) than the
other groups report multiple days of training. In addition, ages 50-59 and 60-67 report
significantly higher percentages (35.6% and 50%, respectively) having received multiple days of
training. For the ethnic groups, counselors in the "Other" group reported a significantly higher
percentage for those having no training (6.1%). Also of note, though not significant, is that the
"Other" category has a much higher percentage who have taken a graduate level course.

Table 11 Significant level of training-demographic variable relationships

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>Level of training</th>
<th>None</th>
<th>&lt;1 day</th>
<th>1 day</th>
<th>Multiple days</th>
<th>Content in course</th>
<th>Graduate course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>.8%</td>
<td>11</td>
<td>4.5%</td>
<td>13</td>
<td>5.3%</td>
<td>23</td>
</tr>
<tr>
<td>6-10 years</td>
<td>0</td>
<td>0%</td>
<td>5</td>
<td>5%</td>
<td>4</td>
<td>4%</td>
<td>30</td>
</tr>
<tr>
<td>11-15 years</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>4.8%</td>
<td>4</td>
<td>4.8%</td>
<td>33</td>
</tr>
<tr>
<td>16-20 years</td>
<td>3</td>
<td>6.5%</td>
<td>1</td>
<td>2.2%</td>
<td>3</td>
<td>6.5%</td>
<td>17</td>
</tr>
<tr>
<td>20+ years</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>2.3%</td>
<td>2</td>
<td>4.7%</td>
<td>20</td>
</tr>
<tr>
<td><strong>School type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public</td>
<td>4</td>
<td>.8%</td>
<td>21</td>
<td>4.2%</td>
<td>25</td>
<td>5%</td>
<td>120</td>
</tr>
<tr>
<td>Private</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>6.7%</td>
<td>1</td>
<td>6.7%</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>20%</td>
<td>0</td>
<td>0%</td>
<td>0</td>
<td>0%</td>
<td>2</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ages 24-29</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>2.1%</td>
<td>3</td>
<td>6.3%</td>
<td>6</td>
</tr>
<tr>
<td>Ages 30-39</td>
<td>2</td>
<td>1.6%</td>
<td>3</td>
<td>2.3%</td>
<td>6</td>
<td>4.7%</td>
<td>12</td>
</tr>
<tr>
<td>Ages 40-49</td>
<td>1</td>
<td>.7%</td>
<td>9</td>
<td>6.2%</td>
<td>6</td>
<td>4.1%</td>
<td>33</td>
</tr>
<tr>
<td>Ages 50-59</td>
<td>2</td>
<td>1.1%</td>
<td>8</td>
<td>4.5%</td>
<td>11</td>
<td>6.2%</td>
<td>63</td>
</tr>
<tr>
<td>Ages 60-67</td>
<td>0</td>
<td>0%</td>
<td>1</td>
<td>6.3%</td>
<td>0</td>
<td>0%</td>
<td>8</td>
</tr>
</tbody>
</table>
Table 11 Significant level of training-demographic variable relationships (continued)

<table>
<thead>
<tr>
<th>Demographic variable</th>
<th>None</th>
<th>&lt;1 day</th>
<th>1 day</th>
<th>Multiple days</th>
<th>Content in course</th>
<th>Graduate course</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td><strong>Ethnic group</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>2</td>
<td>.4%</td>
<td>22</td>
<td>4.7%</td>
<td>113</td>
<td>24.1%</td>
</tr>
<tr>
<td></td>
<td>179</td>
<td>38.2%</td>
<td>130</td>
<td>27.8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>6.1%</td>
<td>0</td>
<td>0%</td>
<td>4</td>
<td>8.2%</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>20.4%</td>
<td>12</td>
<td>24.5%</td>
<td>20</td>
<td>40.8%</td>
</tr>
</tbody>
</table>

Note: Years of experience $\chi^2 = .000$, p < .05, School type $\chi^2 = .009$, p < .05, Age group $\chi^2 = .000$, p < .05, Ethnic group $\chi^2 = .000$, p < .05.

In survey question 15, participants were asked to indicate which training topics were included in the training they have received. "Stages of grief" is the topic for which the highest number of counselors indicated they have received training (n=460). "Crisis simulation/drill" received the fewest responses (n=220). Table 12 shows the number of participants who have received training on each topic in frequencies and percents.

Table 12 Training Received by Topic

<table>
<thead>
<tr>
<th>Topic</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stages of grief</td>
<td>460</td>
<td>89%</td>
</tr>
<tr>
<td>Suicide prevention and intervention</td>
<td>428</td>
<td>82.8%</td>
</tr>
<tr>
<td>Assessment and referral</td>
<td>412</td>
<td>79.7%</td>
</tr>
<tr>
<td>Age specific responses/effects of trauma on children</td>
<td>373</td>
<td>72.1%</td>
</tr>
<tr>
<td>Children's grief reactions based on age</td>
<td>363</td>
<td>70.2%</td>
</tr>
<tr>
<td>Post Traumatic Stress Disorder</td>
<td>359</td>
<td>69.4%</td>
</tr>
<tr>
<td>Responding to violence</td>
<td>319</td>
<td>61.7%</td>
</tr>
<tr>
<td>Critical Incident Stress Debriefing</td>
<td>316</td>
<td>61.1%</td>
</tr>
</tbody>
</table>
Table 12 Training Received by Topic (continued)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide ideation lethality assessment</td>
<td>310</td>
<td>60%</td>
</tr>
<tr>
<td>Legal and ethical issues</td>
<td>284</td>
<td>54.9%</td>
</tr>
<tr>
<td>Psychological first aid</td>
<td>263</td>
<td>50.9%</td>
</tr>
<tr>
<td>Crisis theory</td>
<td>248</td>
<td>48%</td>
</tr>
<tr>
<td>Crisis simulation/drill</td>
<td>202</td>
<td>39.1%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>4.4%</td>
</tr>
<tr>
<td>None of the above</td>
<td>3</td>
<td>.6%</td>
</tr>
</tbody>
</table>

Crises Faced by Counselors

Survey questions one and two were used to explore the third research question:

(3) What situational crises have these school counselors faced in their work?

Survey question one contains a list of crisis situations. Participants were asked to enter the number of times in the past three years they have experienced each crisis situation on the list. Respondents filled in numbers for each situation. In Table 13, the Number of answers column shows how many counselors made an entry for that topic, Minimum shows the lowest number entered, Maximum the highest number entered, Sum shows the total number (e.g., during the past 3 years, the 517 respondents have encountered a total of 4031 suicide ideation crises at work), the Mean column gives the average (for suicide ideation, the average number for this group during the past 3 years is 7.8). Crises involving "suicide ideation" (total=4031) and "child physical abuse" (total=4023) are by far the most frequently encountered, followed by "child sexual abuse" (total=1257) and "suicide gesture" (total=1246). "Fatal accident involving a staff member" (total=57) and "homicide of a staff member" (total=27) are the least frequent.
Table 13 Crisis situations encountered by counselors during the past three years

<table>
<thead>
<tr>
<th>Crisis situation</th>
<th>Number of answers</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide ideation</td>
<td>517</td>
<td>0</td>
<td>138</td>
<td>4031</td>
<td>7.80</td>
</tr>
<tr>
<td>Child physical abuse</td>
<td>506</td>
<td>0</td>
<td>150</td>
<td>4023</td>
<td>7.95</td>
</tr>
<tr>
<td>Child sexual abuse</td>
<td>512</td>
<td>0</td>
<td>120</td>
<td>1257</td>
<td>2.46</td>
</tr>
<tr>
<td>Suicide gesture</td>
<td>512</td>
<td>0</td>
<td>60</td>
<td>1246</td>
<td>2.43</td>
</tr>
<tr>
<td>Death from illness (e.g.; cancer; diabetes)</td>
<td>507</td>
<td>0</td>
<td>36</td>
<td>865</td>
<td>1.71</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>510</td>
<td>0</td>
<td>45</td>
<td>480</td>
<td>.94</td>
</tr>
<tr>
<td>Fatal accident involving a student</td>
<td>509</td>
<td>0</td>
<td>6</td>
<td>392</td>
<td>.77</td>
</tr>
<tr>
<td>Rape</td>
<td>509</td>
<td>0</td>
<td>30</td>
<td>340</td>
<td>.67</td>
</tr>
<tr>
<td>Assault with a weapon on school grounds</td>
<td>503</td>
<td>0</td>
<td>20</td>
<td>247</td>
<td>.49</td>
</tr>
<tr>
<td>Terrorism</td>
<td>505</td>
<td>0</td>
<td>40</td>
<td>223</td>
<td>.44</td>
</tr>
<tr>
<td>Drug/alcohol fatality</td>
<td>507</td>
<td>0</td>
<td>15</td>
<td>195</td>
<td>.38</td>
</tr>
<tr>
<td>School related accident or event involving multiple students (e.g.; bus wreck)</td>
<td>511</td>
<td>0</td>
<td>9</td>
<td>185</td>
<td>.36</td>
</tr>
<tr>
<td>Natural disaster (tornado; flood; etc.)</td>
<td>510</td>
<td>0</td>
<td>5</td>
<td>115</td>
<td>.23</td>
</tr>
<tr>
<td>Homicide of a student</td>
<td>511</td>
<td>0</td>
<td>45</td>
<td>108</td>
<td>.21</td>
</tr>
<tr>
<td>Criminal charges against a staff member</td>
<td>509</td>
<td>0</td>
<td>4</td>
<td>90</td>
<td>.18</td>
</tr>
<tr>
<td>Completed suicide</td>
<td>512</td>
<td>0</td>
<td>7</td>
<td>77</td>
<td>.15</td>
</tr>
<tr>
<td>Man-made disaster (factory explosion; dam collapse; etc.)</td>
<td>507</td>
<td>0</td>
<td>3</td>
<td>71</td>
<td>.14</td>
</tr>
<tr>
<td>Fatal accident involving a staff member</td>
<td>507</td>
<td>0</td>
<td>3</td>
<td>57</td>
<td>.11</td>
</tr>
<tr>
<td>Homicide of a staff member</td>
<td>508</td>
<td>0</td>
<td>21</td>
<td>27</td>
<td>.0531</td>
</tr>
<tr>
<td>Other</td>
<td>190</td>
<td>0</td>
<td>80</td>
<td>423</td>
<td>2.23</td>
</tr>
</tbody>
</table>
Survey question two gathered additional information by asking counselors to state the percentage of their time they devote to crisis intervention or prevention. Answers range from 0% to 95%, with a mean of 16.69% and standard deviation of 18.44. The most frequent answer is 5% (n=116), followed by 10% (n=105). Seventy percent of respondents answered that they spend 15% or less time performing crisis intervention or prevention. Nine percent answered that they spend 50% or more time performing crisis intervention or prevention.

Counselor Preparedness for Crisis Situations

Survey questions 16 through 22 address counselors' preparedness for crisis situations and explore the following research questions:

(4) Do these school counselors feel adequately prepared for crisis situations?

(5) Do these school counselors differ in their perceptions of preparedness according to demographic variables (years of experience, school setting, gender, ASCA membership, level, age group, region, ethnicity)?

Survey question 21 relates directly to research question four, asking participants to indicate whether they feel prepared for specific crisis situations. The situations listed are the same ones participants reported about in survey question one. As shown in Table 14, ninety-three percent (n=481) of respondents said that they feel prepared for crises involving "suicide ideation."

Counselors also said they are prepared for dealing with crises involving "child physical abuse" (90.3%, n=467), "death from illness" (87.2%, n=451), "child sexual abuse" (82.8%, n=428), and "suicide gesture" (80.7%, n=417). The least number of counselors are prepared for "terrorism" (23.8%, n=123), "assault with weapon on school grounds" (38.9%, n=201), "homicide of staff member" (41.8%, n=216), and "man-made disaster" (44.5%, n=230).
### Table 14 Prepared for crisis situations

<table>
<thead>
<tr>
<th>Crisis situation</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
<td>Count</td>
<td></td>
</tr>
<tr>
<td>Suicide ideation</td>
<td>481</td>
<td>93.0%</td>
<td>36</td>
<td>7.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Suicide gesture</td>
<td>417</td>
<td>80.7%</td>
<td>100</td>
<td>19.3%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Completed suicide</td>
<td>310</td>
<td>60.0%</td>
<td>207</td>
<td>40.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Homicide of student</td>
<td>246</td>
<td>47.6%</td>
<td>271</td>
<td>52.4%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Homicide of staff member</td>
<td>216</td>
<td>41.8%</td>
<td>301</td>
<td>58.2%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Drug/alcohol fatality</td>
<td>324</td>
<td>62.7%</td>
<td>193</td>
<td>37.3%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Fatal accident involving student</td>
<td>403</td>
<td>77.9%</td>
<td>114</td>
<td>22.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Fatal accident involving staff member</td>
<td>356</td>
<td>68.9%</td>
<td>161</td>
<td>31.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>School related accident or event involving multiple students</td>
<td>323</td>
<td>62.5%</td>
<td>194</td>
<td>37.5%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Death from illness</td>
<td>451</td>
<td>87.2%</td>
<td>66</td>
<td>12.8%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Assault w/ weapon on school grounds</td>
<td>201</td>
<td>38.9%</td>
<td>316</td>
<td>61.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Child physical abuse</td>
<td>467</td>
<td>90.3%</td>
<td>50</td>
<td>9.7%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Child sexual abuse</td>
<td>428</td>
<td>82.8%</td>
<td>89</td>
<td>17.2%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Rape</td>
<td>275</td>
<td>53.2%</td>
<td>242</td>
<td>46.8%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Sexual assault</td>
<td>294</td>
<td>56.9%</td>
<td>223</td>
<td>43.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Terrorism</td>
<td>123</td>
<td>23.8%</td>
<td>394</td>
<td>76.2%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Natural disaster (tornado; flood; etc.)</td>
<td>291</td>
<td>56.3%</td>
<td>226</td>
<td>43.7%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Man-made disaster (factory explosion; dam collapse; etc.)</td>
<td>230</td>
<td>44.5%</td>
<td>287</td>
<td>55.5%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Criminal charges against staff member</td>
<td>201</td>
<td>38.9%</td>
<td>316</td>
<td>61.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Legal/ethical aspects of crisis</td>
<td>250</td>
<td>48.4%</td>
<td>267</td>
<td>51.6%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>None of the above</td>
<td>15</td>
<td>2.9%</td>
<td>502</td>
<td>97.1%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>100.0%</td>
<td>5</td>
<td>100%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Survey question 22, also related to research question four, asked respondents to choose from a list of reasons that keep them from working more effectively in crisis situations. Lack of
experience was the most frequently chosen answer (n=310), followed by lack of training (n=186) and lack of time (n=163). Table 15 shows the count and percentage for each reason.

Table 15 Factors Affecting Counselors' Effectiveness in Crisis Intervention

<table>
<thead>
<tr>
<th>Effectiveness factor</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of experience with crisis situations</td>
<td>310</td>
<td>60.0%</td>
<td>207</td>
<td>40.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of training</td>
<td>186</td>
<td>36.0%</td>
<td>331</td>
<td>64.0%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of time</td>
<td>163</td>
<td>31.5%</td>
<td>354</td>
<td>68.5%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Too few personnel to deal with crises</td>
<td>140</td>
<td>27.1%</td>
<td>377</td>
<td>72.9%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of administrative support</td>
<td>85</td>
<td>16.4%</td>
<td>432</td>
<td>83.6%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of assistance from others</td>
<td>81</td>
<td>15.7%</td>
<td>436</td>
<td>84.3%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of assistance from district office</td>
<td>61</td>
<td>11.8%</td>
<td>456</td>
<td>88.2%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Lack of community support</td>
<td>29</td>
<td>5.6%</td>
<td>488</td>
<td>94.4%</td>
<td>517</td>
<td>100%</td>
</tr>
<tr>
<td>Other</td>
<td>44</td>
<td>8.5%</td>
<td>473</td>
<td>91.5%</td>
<td>517</td>
<td>100%</td>
</tr>
</tbody>
</table>

Survey questions 16-20, designed to answer research question five, asked participants to identify their levels of preparedness resulting from training for five types of crises: suicide, violence, accidents, alcohol/drugs, and disaster. Participants chose their levels of preparedness from five options ranging from "not at all prepared" to "very well prepared." They could also choose "I have had no training" or "Other." For crises involving suicide, 67.9% (n=351) of respondents rated themselves as at least adequately prepared as the result of training (see below).
Table 16 Counselors' Preparedness for Suicide-Related Crises

<table>
<thead>
<tr>
<th>Level of preparedness</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>10</td>
<td>1.9</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>141</td>
<td>27.3</td>
</tr>
<tr>
<td>Adequately prepared</td>
<td>168</td>
<td>32.5</td>
</tr>
<tr>
<td>Well prepared</td>
<td>118</td>
<td>22.8</td>
</tr>
<tr>
<td>Very well prepared</td>
<td>65</td>
<td>12.6</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 10 Counselors' Preparedness for Suicide-Related Crises
As shown in Table 17 and Graph 11 below, for crises involving violence, 56.5% (n=292) rated themselves at least adequately prepared as the result of training.

Table 17 Counselors’ Preparedness for Violence-Related Crises

<table>
<thead>
<tr>
<th>Level of preparedness</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>18</td>
<td>3.5</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>31</td>
<td>6.0</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>171</td>
<td>33.1</td>
</tr>
<tr>
<td>Adequately prepared</td>
<td>152</td>
<td>29.4</td>
</tr>
<tr>
<td>Well prepared</td>
<td>106</td>
<td>20.5</td>
</tr>
<tr>
<td>Very well prepared</td>
<td>34</td>
<td>6.6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Missing</td>
<td>4</td>
<td>.8</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 11 Counselors’ Preparedness for Violence-Related Crises
For crises involving accidents, 61.9% (n=320) of respondents rated themselves at least adequately prepared. The frequencies and percents for accident-related crisis are shown below.

Table 18 Counselors' Preparedness for Accident-Related Crises

<table>
<thead>
<tr>
<th>Level of preparedness</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>20</td>
<td>3.9</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>17</td>
<td>3.3</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>152</td>
<td>29.4</td>
</tr>
<tr>
<td>Adequately prepared</td>
<td>141</td>
<td>27.3</td>
</tr>
<tr>
<td>Well prepared</td>
<td>125</td>
<td>24.2</td>
</tr>
<tr>
<td>Very well prepared</td>
<td>54</td>
<td>10.4</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>.6</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>1.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>517</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Graph 12 Counselors' Preparedness for Accident-Related Crises
For crises involving alcohol/drugs, 60.9% (n=315) rated themselves at least adequately prepared as the result of training. Table 19 and Graph 13 show the frequencies.

Table 19 Counselors’ Preparedness for Alcohol/Drug-Related Crises

<table>
<thead>
<tr>
<th>Level of preparedness</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>25</td>
<td>4.8</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>25</td>
<td>4.8</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>151</td>
<td>29.2</td>
</tr>
<tr>
<td>Adequately prepared</td>
<td>135</td>
<td>26.1</td>
</tr>
<tr>
<td>Well prepared</td>
<td>133</td>
<td>25.7</td>
</tr>
<tr>
<td>Very well prepared</td>
<td>47</td>
<td>9.1</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>.2</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 13 Counselors’ Preparedness for Alcohol/Drug-Related Crises
For crises involving disaster, 45.6% (n=236) rated themselves at least adequately prepared.

Table 20 and Graph 14 show the frequencies for counselors' preparedness as the result of training for crises involving disaster.

Table 20 Counselors' Preparedness for Disaster-Related Crises

<table>
<thead>
<tr>
<th>Level of preparedness</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No training</td>
<td>45</td>
<td>8.7</td>
</tr>
<tr>
<td>Not at all prepared</td>
<td>58</td>
<td>11.2</td>
</tr>
<tr>
<td>Somewhat prepared</td>
<td>176</td>
<td>34.0</td>
</tr>
<tr>
<td>Adequately prepared</td>
<td>124</td>
<td>24.0</td>
</tr>
<tr>
<td>Well prepared</td>
<td>84</td>
<td>16.2</td>
</tr>
<tr>
<td>Very well prepared</td>
<td>28</td>
<td>5.4</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>.4</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Graph 14 Counselors' Preparedness for Disaster-Related Crises
Research question five, regarding whether counselors differ in their levels of preparedness according to demographics, was answered by completing step-wise multiple regression analyses using level of preparedness as the dependent variable and each of the demographic categories as independent variables. For crises involving suicide, 1-5 years of experience was entered first and explained 1.6% of the variance in level of preparedness ($F_{1, 511} = 8.458, p < .05$). Elementary level was entered second and explained a further 1.7% ($F_{1, 510} = 8.636, p < .05$). The remaining demographic variables were excluded, indicating that they do not significantly predict level of preparedness as a result of training. Elementary level and 1-5 years of experience are associated with a lower level of preparedness resulting from training for suicide related crises. See Table 21 for information on the significant predictors.

Table 21 Demographic predictors of level of preparedness for suicide-related crises

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>Beta</th>
<th>$t$</th>
<th>Significance of $t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years of experience</td>
<td>.016</td>
<td>-.142</td>
<td>-3.249</td>
<td>.001</td>
</tr>
<tr>
<td>Elementary</td>
<td>.033</td>
<td>-.129</td>
<td>-2.939</td>
<td>.003</td>
</tr>
</tbody>
</table>

For crises involving violence, only 1-5 years of experience was entered and explained 3.6% of the variance in level of preparedness ($F_{1, 511} = 18.914, p < .05$). One-five years of experience is associated with a lower level of preparedness resulting from training for violence related crises. Results are shown in Table 22.

Table 22 Demographic predictors of level of preparedness for violence-related crises

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>Beta</th>
<th>$t$</th>
<th>Significance of $t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years of experience</td>
<td>.036</td>
<td>-.189</td>
<td>-4.349</td>
<td>.000</td>
</tr>
</tbody>
</table>
For crises involving accidents, again, only 1-5 years of experience was a significant predictor, again associated with a lower level of preparedness, explaining 4.7% of the variance in preparedness as the result of training ($F_{1,510} = 25.357, p < .05$), see Table 23.

Table 23 Demographic predictors of level of preparedness for accident-related crises

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>Beta</th>
<th>$t$</th>
<th>Significance of $t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years of experience</td>
<td>.047</td>
<td>-.218</td>
<td>-5.036</td>
<td>.000</td>
</tr>
</tbody>
</table>

For crises involving alcohol/drugs, 1-5 years of experience was a significant predictor, explaining 2.3% of the variance ($F_{1,515} = 11.892, p < .05$), elementary level was a significant predictor, explaining an additional 3.1% of the variance ($F_{1,514} = 16.998, p < .05$), and Caucasian was a significant predictor, explaining an additional 1% of the variance ($F_{1,513} = 5.638, p < .05$). In this analysis, 1-5 years of experience and elementary level are associated with lower levels of preparedness and Caucasian is associated with a higher level of preparedness. See Table 24 for details.

Table 24 Demographic predictors of level of preparedness for alcohol/drug-related crises

<table>
<thead>
<tr>
<th>Variable</th>
<th>$R^2$</th>
<th>Beta</th>
<th>$t$</th>
<th>Significance of $t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years of experience</td>
<td>.023</td>
<td>-.162</td>
<td>-3.762</td>
<td>.000</td>
</tr>
<tr>
<td>Elementary level</td>
<td>.054</td>
<td>-.174</td>
<td>-4.039</td>
<td>.000</td>
</tr>
<tr>
<td>Caucasian</td>
<td>.064</td>
<td>.102</td>
<td>2.375</td>
<td>.018</td>
</tr>
</tbody>
</table>

For crises related to disaster, 1-5 years of experience and high school level were significant predictors. One-five years of experience explained 2.7% of the variance in level of preparedness
(\(F_{1, 515} = 14.415, p < .05\)) and high school level explained an additional .9% of the variance (\(F_{1, 514} = 4.741, p < .05\)), both associate with lower preparedness, as shown in Table 25.

Table 25 Demographic predictors of level of preparedness for disaster-related crises

<table>
<thead>
<tr>
<th>Variable</th>
<th>(R^2)</th>
<th>Beta</th>
<th>t</th>
<th>Significance of t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years of experience</td>
<td>.027</td>
<td>-.159</td>
<td>-3.668</td>
<td>.000</td>
</tr>
<tr>
<td>High school level</td>
<td>.036</td>
<td>-.094</td>
<td>-2.177</td>
<td>.030</td>
</tr>
</tbody>
</table>

It is important to note that, although some significant effects were found in this analysis, the effect sizes are all quite small, explaining a maximum of 4.7% and a minimum of less than one percent of the variances in levels of preparedness. A pattern does emerge with 1-5 years of experience being the demographic group that is associated with lower levels of preparedness resulting from training for each of the five types of crisis. This is an interesting result, given that the previously conducted Crosstabs showed the percentage (9.4%) of counselors with 1-5 years of experience reporting having multiple days of training is significantly lower than the other groups. For the same experience category, 47.5% report having crisis intervention content in a graduate course, significantly higher than the same category for the other groups.

Additional Training Needs of Counselors

In addition to assessing training received, situations encountered and perceptions of preparedness, this study explored participants' perceptions of additional training needs through research question six:

(6) What additional training regarding crisis intervention do these school counselors believe they need?
Survey questions 23 and 24 address this question. Question 23 asked respondents to indicate whether they would like to have additional training in crisis intervention. The majority of respondents indicate that they do want additional training (88.8%, n=459). Table 26 shows the frequencies and percents for question 23.

Table 26 Counselors' Desire for Additional Training

<table>
<thead>
<tr>
<th>Answer</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>459</td>
<td>88.8%</td>
</tr>
<tr>
<td>No</td>
<td>30</td>
<td>5.8%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>4.4%</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>517</td>
<td>100%</td>
</tr>
</tbody>
</table>

Survey question 24 presented the same list of training topics as question 15, asking them to mark the topics for which they would like additional training. More than half of respondents indicate that they would like to receive additional training regarding "responding to violence" (61.9%, n=320), "psychological first aid" (58%, n=300), "crisis simulation/drill" (55.9%, n=289), "critical incident stress debriefing" (55.1%, n=285), and "legal/ethical issues in crisis intervention" (53%, n=274). Table 27 shows the frequencies and percents for each topic.

Table 27 Frequencies for training topics desired by counselors

<table>
<thead>
<tr>
<th>Training topic</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>responding to violence</td>
<td>320</td>
<td>61.9%</td>
<td>197</td>
</tr>
<tr>
<td>psychological first aid</td>
<td>300</td>
<td>58%</td>
<td>217</td>
</tr>
<tr>
<td>critical incident stress debriefing</td>
<td>285</td>
<td>55.1%</td>
<td>232</td>
</tr>
</tbody>
</table>
Table 27 Frequencies for training topics desired by counselors (continued)

<table>
<thead>
<tr>
<th>Training topic</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
</tr>
<tr>
<td>legal/ethical issues</td>
<td>274</td>
<td>53%</td>
<td>243</td>
</tr>
<tr>
<td>Post Traumatic Stress Disorder</td>
<td>230</td>
<td>44.5%</td>
<td>287</td>
</tr>
<tr>
<td>crisis theory</td>
<td>217</td>
<td>42%</td>
<td>300</td>
</tr>
<tr>
<td>assessment and referral</td>
<td>207</td>
<td>40%</td>
<td>310</td>
</tr>
<tr>
<td>age specific responses/effects of trauma</td>
<td>198</td>
<td>38.3%</td>
<td>319</td>
</tr>
<tr>
<td>suicide ideation lethality assessment</td>
<td>190</td>
<td>36.8%</td>
<td>327</td>
</tr>
<tr>
<td>suicide prevention and intervention</td>
<td>174</td>
<td>33.7%</td>
<td>343</td>
</tr>
<tr>
<td>children's grief reactions/age</td>
<td>153</td>
<td>29.6%</td>
<td>364</td>
</tr>
<tr>
<td>stages of grief</td>
<td>74</td>
<td>14.3%</td>
<td>443</td>
</tr>
<tr>
<td>none of the above</td>
<td>10</td>
<td>1.9%</td>
<td>507</td>
</tr>
</tbody>
</table>

A comparison of the results for question 24 ("Please mark each of the following topics for which you would like additional training.") and the results for question 15 ("Which of the following topics were covered in your crisis intervention training?") is contained in Table 28 below. The topics are listed in descending order based on the number of counselors who desire additional training. Interestingly, the two topics that received the highest ratings for additional training, "responding to violence" and "psychological first aid," also received high ratings (61.7% and 50.9%, respectively) for previous training, indicating that, as a group, these counselors want more training even though they have previous training on those topics. As shown, the same is true, with differing percentages, for each topic listed.
Table 28 Comparison of previous training topics and desired training topics

<table>
<thead>
<tr>
<th>Topic</th>
<th>Counselors having received previous training</th>
<th>Counselors indicating desire for additional training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Percent</td>
</tr>
<tr>
<td>Responding to violence</td>
<td>319</td>
<td>61.7%</td>
</tr>
<tr>
<td>Psychological first aid</td>
<td>263</td>
<td>50.9%</td>
</tr>
<tr>
<td>Crisis simulation/drill</td>
<td>202</td>
<td>39.1%</td>
</tr>
<tr>
<td>Critical Incident Stress Debriefing</td>
<td>316</td>
<td>61.1%</td>
</tr>
<tr>
<td>Legal and ethical issues</td>
<td>284</td>
<td>54.9%</td>
</tr>
<tr>
<td>Post Traumatic Stress Disorder</td>
<td>359</td>
<td>69.4%</td>
</tr>
<tr>
<td>Crisis theory</td>
<td>248</td>
<td>48%</td>
</tr>
<tr>
<td>Assessment and referral</td>
<td>412</td>
<td>79.7%</td>
</tr>
<tr>
<td>Age specific responses/effects of trauma</td>
<td>373</td>
<td>72.1%</td>
</tr>
<tr>
<td>Suicide ideation lethality assessment</td>
<td>310</td>
<td>60%</td>
</tr>
<tr>
<td>Suicide prevention and intervention</td>
<td>428</td>
<td>82.8%</td>
</tr>
<tr>
<td>Children's grief reactions based on age</td>
<td>363</td>
<td>70.2%</td>
</tr>
<tr>
<td>Stages of grief</td>
<td>460</td>
<td>89%</td>
</tr>
<tr>
<td>None of the above</td>
<td>3</td>
<td>.6%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

Hypothesis Test

One research hypothesis was tested for the data: Counselors who have higher levels of training in crisis intervention will report higher levels of preparedness for crisis intervention.

Simple analysis of variance was used to compare the means of the training level groups on their
levels of preparedness for crises. The null hypothesis, $H_0$: There is no relationship between level of training and level of preparedness, was rejected. The Tukey HSD result is that for all five categories of crises, levels of preparedness differ significantly based on levels of training. For each category of crisis, the means of preparedness for counselors who have had multiple days of training and for counselors who have had a graduate course in crisis intervention are higher than those in the other training categories. For suicide and violence related crises, the means of preparedness increase in the following order: no training, inservice <1 day, 1 day, content in a graduate course, multiple days training, and graduate course, indicating that means for preparedness do in fact increase with level of training. For accidents, alcohol/drugs, and disaster related crises, the means of preparedness increase in the following order: no training, 1 day, inservice <1 day, content in a graduate course, multiple days training, and graduate course. The significance statistics are shown in Table 29 below.

Table 29 ANOVA results for level of training and level of preparedness

<table>
<thead>
<tr>
<th>Crisis type</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>$F$</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>83.139</td>
<td>5</td>
<td>16.628</td>
<td>14.683</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>568.489</td>
<td>502</td>
<td>1.132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>651.628</td>
<td>507</td>
<td>1.132</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Violence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>104.222</td>
<td>5</td>
<td>20.844</td>
<td>18.313</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>571.390</td>
<td>502</td>
<td>1.138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>675.612</td>
<td>507</td>
<td>1.138</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accidents</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between groups</td>
<td>100.184</td>
<td>5</td>
<td>20.037</td>
<td>15.292</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>657.784</td>
<td>502</td>
<td>1.310</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>757.969</td>
<td>507</td>
<td>1.310</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 29 ANOVA results for level of training and level of preparedness (continued)

<table>
<thead>
<tr>
<th>Crisis type</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol/Drugs</td>
<td>Between groups</td>
<td>90.341</td>
<td>5</td>
<td>18.068</td>
<td>13.193</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>687.494</td>
<td>502</td>
<td>1.370</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>777.835</td>
<td>507</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disaster</td>
<td>Between groups</td>
<td>77.786</td>
<td>5</td>
<td>15.557</td>
<td>9.983</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>782.262</td>
<td>502</td>
<td>1.558</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>860.047</td>
<td>507</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Qualitative Data

The final survey item, number 27, requested that respondents enter any additional information they deemed important for the study. This item received over 200 responses. These responses were explored using content analysis, defined by Silverman (1993) as "an accepted method of textual investigation…It involves establishing categories and then counting the number of instances when those categories are used in a particular item of text…(p. 59)."

Following the content analysis, thematic analysis (as described by Ely, 1991) was conducted upon the categories, resulting in revision of some categories and elimination of others.

Categories were then examined, seeking themes in responses. Several themes emerged from this analysis:

(1) Sixteen respondents discussed the role of the school counselor, including the topics of high caseloads and administrative duties being assigned to counselors and how these situations negatively impact counselors' abilities to provide crisis intervention services and to seek additional crisis intervention training.
(2) Thirty-five respondents used the space provided for further discussion of the need for additional crisis intervention training, some expressing the importance of school district support for training of all staff. Counselors expressed preferences for training that is provided by experts familiar with schools, that is practical in content, and that is reinforced frequently. Some counselors suggested yearly follow-up training; one suggested a certification program that would require updated training on a regular basis; some suggested that a course in crisis intervention should be a requirement in counselor preparation programs.

(3) Six counselors cited the attitudes of school administration as having a negative impact on crisis intervention in terms of failing to support counselors' efforts to increase their preparedness, adopting the attitude that "a crisis like that won't happen here," and not providing crisis-related practice/drills for faculty members.

(4) Eleven respondents stated that they have concerns regarding lack of opportunities for practicing skills acquired through training, lamenting the fact that they rarely have crisis simulation activities that would provide practice and chances for making additional preparation for crises.

(5) Four counselors discussed barriers to additional training: lack of funding available to them to pay for training that is available, lack of time to attend trainings, and lack of administrative support for seeking training.

(6) Eight respondents expressed their belief that counselor education programs should be providing crisis intervention courses as an integral program component.

(7) Five counselors stated they would appreciate access to specific information related to school crisis intervention via the Internet.
(8) Three additional counselors focused their statements on the importance of having a proactive approach to preparedness for crisis intervention.

(9) Ten respondents emphasized the importance of clear communication and agreement among counselors and other school staff, especially administrators, regarding crisis intervention and crisis preparedness.

(10) Four counselors discussed the critical need for support/networking for counselors during and after crises.

(11) Nine counselors used the opportunity to relate that in their schools, districts, or states, crisis intervention is a priority, good training is provided, and/or to describe experiences during which crisis intervention was conducted well.

(12) Nine counselors commented about the importance of preparedness for crises related to terrorism.

(13) Other comments included "schools are overwhelmed" and each of us must seek out the training we need.

(14) The remaining responses were clarification of earlier answers on the survey, comments about survey questions, and suggestions for crisis related topics for future research.

Summary

This chapter presents the results of the study. Descriptive analyses of the demographics are presented first. The six research questions are presented, along with data and analyses in answer to each question. The results of the hypothesis test are reported. The chapter concludes with a thematic analysis of the responses to the narrative portion of the survey.
Chapter Five: Discussion

This chapter contains an overall picture of the results of the study. First, a profile of the participants is given. Discussion of the results in terms of each research question is presented and related to findings of other researchers. The chapter closes with a discussion of conclusions, limitations of the study, recommendations for future research and practice, and a summary.

Profile of participants

Respondents in the study can be described as follows: average age 44 years with one third (34%) between the ages of 50 and 59, 83% female, 91% Caucasian, 47% with 1-5 years of experience as a school counselor, and 74% members of ASCA. The vast majority are employed in public schools (96%), most of them work at the elementary (34%) or high school (30%) level, the greatest percentage in suburban areas (43%), located in the southeastern United States (34%). This demographic profile was compared with two recent, large, nation-wide studies, using a method similar to that used by Bodenhorn (2001) to examine external validity. As shown in the table below, the studies are comparable on ethnicity and age. The current study differs in terms of years of experience, with participants in this study having fewer years of experience than those in the two previous studies. The current study also differs on gender, with the current study having a greater percentage of female counselors than the two previous studies.

Table 25 Demographic comparison

<table>
<thead>
<tr>
<th>Study</th>
<th>Caucasian</th>
<th>Other</th>
<th>Female</th>
<th>Age</th>
<th>Average Yrs. Experience.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Miller (1998)</td>
<td>87.8%</td>
<td>12.5%</td>
<td>66%</td>
<td>48.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Coll and Freeman (1997)</td>
<td>90% elem.</td>
<td></td>
<td>87%</td>
<td>42</td>
<td>6.1 elem.</td>
</tr>
<tr>
<td></td>
<td>93% sec.</td>
<td></td>
<td>76%</td>
<td>44</td>
<td>9 middle</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>61%</td>
<td>45</td>
<td>12.3 high</td>
</tr>
<tr>
<td>Current study</td>
<td>91%</td>
<td>9%</td>
<td>83%</td>
<td>44</td>
<td>1-5 years</td>
</tr>
</tbody>
</table>
It is possible that counselors who are newer to the profession are more likely to use email and the Internet as resources because they are "learning the ropes" of their jobs as they currently exist, with the impact of computer technologies growing rapidly. Counselors who have spent more years in the field may be less likely to use these technologies because of their relatively recent development as available and/or required tools. A study of the demographics of school counselors as a population or reliable demographic information about school counselors would assist in establishing external validity for studies involving school counselors. Without this information, however, conclusions regarding the differences among these studies are largely conjecture on the part of the researcher.

Research questions one and two

The first and second research questions, "Do participating practicing school counselors have training in situational crisis intervention skills?" and "What is the format and source of this training?" were answered by responses to survey questions 14 and 15. Only 1.5% of the counselors in this study report having had no crisis intervention training. Fifty-eight percent of respondents report having had multiple days of training, 55% have had content in a graduate level counselor preparation course, and 29% have had a graduate level course in crisis intervention. These are heartening findings in light of the recommendations in the literature for specific training in crisis intervention skills in addition to training in counseling skills (Greenstone and Leviton, 2002; Johnson, 2000; Myer, 2001; Pitcher & Poland, 1992; Schonfeld & Newgass, 2000). The 29% having had a course in crisis intervention is considerably higher than that in Tabasso's (2001) study of school psychologists, in which 9% had completed a full course. Tabasso had expected a higher level of training in her study. This difference could reflect the fact that counselors are expected to take the lead in school crisis intervention (Jaksec, 1996).
and that authors in the field have emphasized that crisis intervention is an integral part of comprehensive counseling programs (Aronin, 1996; Adelman and Taylor, 2001; Lockhart and Keys, 1998). The fact remains that over two thirds of respondents have not completed a course in crisis intervention. In light of the qualitative results, in which several respondents expressed their opinions that counselor education programs should be providing crisis intervention courses, this indicates a need for examination of related policy and program components in counselor education programs.

More counselors in this study have crisis intervention training than the teachers in the 1991 study by Taylor, Hawkins and Brady. In their study, Taylor Hawkins and Brady found that 56% of participants had received some crisis intervention training. It is possible that the recent emphasis on school crisis intervention in general, in addition to the recognition of the role of school counselors in crisis intervention, impacts this difference.

As reported in chapter four, there are no significant differences in level of training for participating counselors based on grade level, setting, region, gender, or ASCA membership. Significant differences exist based on years of experience, school type, age group and ethnic group. For counselors reporting having received no crisis intervention training, those with 16-20 years of experience represent a higher percentage (6.5%) than the other age groups. The percentage (9.4%) of counselors with 1-5 years of experience who report having multiple days of training is significantly lower than the other groups. For the same experience category, 47.5% report having crisis intervention content in a graduate course, significantly higher than the same category for the other groups. Counselors with 20+ years of experience have a significantly higher percentage reporting having received multiple days of training. The finding that fewer counselors with the least experience report having multiple days of training likely reflects that
their work experiences have not presented as many opportunities for training conferences and workshops as the more experienced groups. In addition, the least experienced group reports a higher percentage having had content in a counselor preparation course. This group is most likely to have completed their counselor preparation programs more recently, when the emphasis on crisis intervention has increased due to large scale violent attacks in schools and the fact that, as confirmed by Russo (2000), states have increased focus on crisis preparedness. It is logical that counselors with 20+ years of experience have had more opportunities for training conferences/workshops and therefore have a higher percentage reporting having had multiple days trainings. It is disconcerting that counselors with 16-20 years of experience have the highest percentage having received no crisis intervention training. Further study is needed to explore the possible causes for this finding.

The differences among age groups are that for ages 30-39, a significantly smaller percentage (9.4%) than the other groups report multiple days of training. This group is in the minority in terms of age of respondents, however. It is possible that, since 65.5% of respondents are in the higher age categories, they have had more opportunities for crisis intervention workshops/conferences in their careers than the 30-39 year-old group. In addition, ages 50-59 and 60-67 report significantly higher percentages (35.6% and 50%, respectively) having received multiple days of training. It is logical that the two groups with the highest ages report the highest level of multiple days of training for the same reason.

For the ethnic groups, counselors in the "Other" group reported a significantly higher percentage for those having no training (6.1%). Also of note, though not significant, is that the "Other" category has a much higher percentage who have taken a graduate level course. Because
the "Caucasian" group is over five times as large as the "Other" group, these findings are statistically, but not practically significant.

The difference according to school type is due to the large percentage (20%) of counselors in "Other" type schools reporting having received no training. It is not known what type of school is represented. In addition, because only five respondents did not enter "Public" or "Private" for their school type, this percentage represents only one person and so has little practical significance.

In survey question 15, participants were asked to indicate which training topics were included in the training they have received. "Stages of grief" is the topic on which the highest percentage (89%) of counselors indicate they have received training, followed by "suicide prevention and intervention (83%)," "assessment and referral (80%)," "age specific responses of children to trauma (72%)," and "children's grief reactions (70%)." Fifty percent or fewer have received training on "crisis theory," "psychological first aid," and "crisis simulation/drill." "Crisis simulation/drill" is the topic that received the fewest responses (39%). Because the list of training topics was devised from a review of the literature on recommended crisis intervention training topics (see chapter two, pages 24-25), respondents can be said to have received training that reflects the recommendations in the literature in terms of topic content. Sixty one percent of participants report that they have had training in Critical Incident Stress Debriefing, 49% have not had this training and 55% indicated they would like additional training on this topic. This is positive, considering ASCA's recommendation in its position statement regarding the school counselor's role in critical incident response that the school counselor "…should provide critical incident stress debriefing for students, staff and counselors (American School Counselor Association, 2000, pg. 2)." It is crucial that those counselors who are untrained in this area
receive the necessary training in order to fulfill this expectation. It is a concern that less than half of respondents have had simulations as part of their training. This point will be discussed in a later section of the chapter.

Research question three

Survey questions one and two were used to explore the third research question: "What situational crises have these school counselors faced in their work?" Survey question one contains a list of crisis situations. Participants were asked to enter the number of times in the past three years they have experienced each crisis situation on the list. Crises involving "suicide ideation" (total=4031) and "child physical abuse" (total=4023) are encountered most by respondents, followed by "child sexual abuse" (total=1257) and "suicide gesture" (total=1246). The least encountered are "fatal accident involving a staff member" (total=57) and "homicide of a staff member" (total=27). This information provides a beginning point for research regarding the types and frequencies of crises encountered by school counselors. Of note is that suicide related crises are two of the four most frequently occurring crises for this group and "suicide prevention and intervention" is the second most frequently reported training topic received, indicating that the counselors' training content is congruent with their work experiences in this area.

Survey question two gathered additional information by asking counselors to state the percentage of their time they devote to crisis intervention or prevention. Answers range from 0% to 95%, with a mean of 16.69%. Seventy percent of respondents answered that they spend 15% or less time performing crisis intervention or prevention, nine percent spend 50% or more. In ter Maat's study (2000) of the functions of 162 school counselors in the Northern Virginia area, counselors reported that they spend 8% of their time in crisis intervention and mediation. The
counselors in the current study report twice the percentage reported by those in ter Maat's study. This difference could be due to the fact that counselors in ter Maat's study are concentrated in one locality, reflecting a more homogeneous population. The difference could also reflect that respondents in this study have a stronger interest in crisis intervention, perhaps defining it more broadly or being more likely to become involved in crisis intervention activities. In addition, some participants may believe that much of their work is related to crisis prevention and therefore state a much higher percentage than if the question had been in regard to crisis intervention only.

Research question four

The fourth research question, "Do these school counselors feel adequately prepared for crisis situations?" was answered via survey questions 16 through 22. Survey question 21 relates directly to research question four, asking participants to indicate whether they feel prepared for specific crisis situations. The situations listed are the same ones as in survey question one. Ninety-three percent of respondents said that they feel prepared for crises involving "suicide ideation," for "child physical abuse," 90%, for "death from illness," 87.2%, for "child sexual abuse," 82.8%, and "suicide gesture," 80.7%. The least number of counselors are prepared for "terrorism" (23.8%), "assault with weapon on school grounds" (38.9%), "homicide of staff member" (41.8%), and "man-made disaster" (44.5%). Two of the top rated crises on preparedness are suicide related. The vast majority of counselors in this study report they feel prepared for this type of crisis. This finding is concurrent with that of Tabasso (2001), who found that school psychologists felt most prepared for crises related to suicide ideation/gesture. In the current study, suicide represents one of the top two categories of crisis respondents have experienced during the past three years and the second highest ranking topic in their previously
received crisis intervention training. A logical conclusion is that their feelings of preparedness reflect their training and experiences with suicide prevention and intervention. Child physical and sexual abuse are two of the four most frequently reported crises encountered and two of the top four in terms of percentage of counselors who feel prepared to deal with them. This could indicate that counselors' experiences have helped them feel prepared for future crises in these areas. Abuse was not on the list of training topics presented in the survey, so comparison is not possible on that topic.

Survey question 22 asked respondents to choose from a list of reasons that keep them from working more effectively in crisis situations. Lack of experience is the most frequently chosen answer (n=310), followed by lack of training (n=186) and lack of time (n=163). Although 36% of respondents chose lack of training as a hindrance to effectiveness during crisis, 60% chose lack of experience, indicating that this group values experience more than training in terms of preparing them for crisis situations. This important finding relates to that mentioned in the discussion of research questions one and two. Sixty percent of respondents indicate that lack of experience with crisis situations prevents them from performing effectively during crises. Only 39% of respondents have had simulations as part of their training. Fifty six percent of respondents indicated they would like to participate in crisis simulations as part of their future training. Crisis simulations/drills are training topics recommended by those in the field of crisis intervention (e.g., Pitcher & Poland, 1992 and J. L. Greenstone, personal communication, January 8, 2002). In addition, in the qualitative section of the survey, eleven respondents stated that they have concerns regarding lack of opportunities for practicing skills acquired through training, lamenting the fact that they rarely have crisis simulation activities that would provide practice and chances for making additional preparation for crises. These facts and findings
indicate that participants agree with the authors who have indicated the importance of crisis simulations/drills as a component of crisis intervention training.

Survey questions 16-20, were designed to answer research questions four and five. Participants were asked to identify their levels of preparedness resulting from training for five types of crises: suicide, violence, accidents, alcohol/drugs, and disaster. For crises involving suicide, 67.9% (n=351) of respondents rate themselves as at least adequately prepared as the result of training. This is congruent with previously discussed results, namely that suicide is one of the most frequently experienced crises, that it is one of the most frequently received training topics, that 93% of respondents indicate they are prepared for suicide ideation, and that 81% indicate they are prepared for suicide gesture. It should be noted that the 68% rating themselves as prepared as the result of training is considerably lower than the 93% and 81% who say they are prepared for these crises. This indicates that experience is a strong factor in participants' self-assessment of preparedness.

For crises involving violence, 56.5% (n=292) rate themselves at least adequately prepared as the result of training. Sixty-two percent of participants report responding to violence as a training topic received. Six of the respondents' eleven most frequently experienced crises involve violence. This could be an indication that both training and experience impact perceptions of preparedness for violence related crises.

For crises involving accidents, 61.9% (n=320) of respondents rate themselves at least adequately prepared as the result of training. Accidents ranked seventh and twelfth in terms of frequency for crises encountered by respondents. Sixty-three to 78% of respondents indicate they are prepared for the accident related crises on the list. Accident was not included on the training topic list. The difference in the percentage of those who say they are prepared (63-78%) versus
those who say they are prepared as the result of training (61.9%) could be an indication that experience has impacted preparedness for accidents as well.

For crises involving alcohol/drugs, 60.9% (n=315) rate themselves at least adequately prepared as the result of training. Participants report having dealt with a total of 195 alcohol/drug related fatalities during the past three years. Other alcohol/drug related crises were not listed. Sixty-three percent of respondents indicate they are prepared for this type of fatality. The percentage who indicate they are prepared is close to the percentage indicating they are prepared as the result of training for this type of crisis. Alcohol/drugs was not listed as a training topic.

For crises involving disaster, 45.6% (n=236) rate themselves at least adequately prepared as the result of training. This is the only type of crisis for which fewer than half of respondents rated themselves adequately prepared. The two categories of disaster were among the five least frequent crises for this group of counselors and the four least frequent crisis situations for which participants are prepared. Interestingly, 45% of participants indicate they are prepared for disaster related crises. This suggests that because disaster related crises are among the least frequent, experience has not been a major factor in preparedness for this group of counselors.

Research question five

Research question five, "Do these school counselors differ in their perceptions of preparedness according to demographic variables?" was answered by completing step-wise multiple regression analyses using level of preparedness as the dependent variable and each of the demographic categories as independent variables. For each of the five categories of crisis, counselors with 1-5 years of experience have significantly lower means on preparedness based on training. For violence and alcohol/drug related crises, elementary level participants have significantly lower means for level of preparedness as the result of training. For disaster, high
school level counselors have means significantly lower on preparedness. This finding differs
from Tabasso's (2001), who found no difference for school psychologists’ preparedness
according to grade levels. For alcohol/drug related crises, Caucasian participants have
significantly higher means on level of preparedness resulting from training. None of the other
demographic variables have significant impact on level of preparedness. These results should be
interpreted with caution; the large discrepancy between the number of participants in the
Caucasian and Other groups decreases the validity of the comparison. In addition, the effect sizes
of these differences are quite small, with a maximum of less than 5% of the variance.

It is possible that the group with 1-5 years of experience is less prepared due to the fact
that fewer of them have had multiple days of training. The 1-5 years of experience group has a
higher percentage who had crisis intervention content in their counselor preparation programs.
Because the assumption is that the least experienced group completed these programs more
recently than counselors with more experience, it is possible that they answered based on their
feelings of preparedness without considering their training. It is also possible that there is
variability in the quality and actual content of the crisis intervention components of their
graduate programs, and that some were left feeling unprepared despite having some training. It
can be deduced that experience influences preparedness for each category of crisis. An additional
consideration is that of the findings of Eldred's (1996) study, that crisis team training had no
significant effect on coping or knowledge, but that trained groups had significantly lower levels
of anxiety prior to crisis simulations.

Research question six

Research question six: "What additional training regarding crisis intervention do these
school counselors believe they need?" was addressed by survey questions 23 and 24. Question 23
asked respondents to indicate whether they would like to have additional training in crisis intervention. The majority of respondents indicate that they do want additional training (88.8%). Survey question 24 presented the list of training topics. More than half of respondents indicate that they would like to receive additional training regarding "responding to violence," "psychological first aid," "crisis simulation/drill," "critical incident stress debriefing," and "legal/ethical issues in crisis intervention." This finding is supported by that of Eldred (1996), who found that crisis teams who had training before completing crisis simulations had significantly lower levels of anxiety than untrained groups.

A comparison of the results for survey question 24 ("Please mark each of the following topics for which you would like additional training.") and the results for survey question 15 ("Which of the following topics were covered in your crisis intervention training?") indicates that for each topic that was listed, counselors in this study wish to have additional training. The two topics that received the highest ratings for additional training, "responding to violence" and "psychological first aid," also received high ratings (61.7% and 50.9%, respectively) for previous training. This was to be expected, considering that almost 90% of respondents indicated they want more training in crisis intervention. In the qualitative section of the survey, 35 respondents reiterated the need for additional crisis intervention training and eight respondents expressed their belief that counselor education programs should be providing crisis intervention courses as an integral program component. In Tabasso's (2001) study, 70% of school psychologists thought that crisis intervention would be very important to include in a graduate program curriculum in their field. The need for additional training further supports the findings of Ballard (1995) and Lichtenstein, et. al. (1994), both of which reported counselors' desire for additional training in crisis intervention.
Hypothesis Test

One research hypothesis was tested for the data: Counselors who have higher levels of training in crisis intervention will report higher perceptions of preparedness for crisis intervention. Simple analysis of variance was used to compare the means of the training level groups on their levels of preparedness for crises. The result is that for all five categories of crisis, levels of preparedness differ significantly based on levels of training. For each category of crisis, the means of preparedness for counselors who have had multiple days of training and for counselors who have had a graduate course in crisis intervention are higher than those in the other training categories. For suicide and violence related crises, the means of preparedness increase in the following order: no training, inservice <1 day, 1 day, content in a graduate course, multiple days training, and graduate course, indicating that means for preparedness do in fact increase with level of training. For accidents, alcohol/drugs, and disaster related crises, the means of preparedness increase in the following order: no training, 1 day, inservice <1 day, content in a graduate course, multiple days training, and graduate course.

These results can be cautiously interpreted to indicate that feelings of preparedness do increase with level of training. It is the belief of the researcher that the scale derived for the study (with multiple days training ranking lower than content in a counselor preparation course) should be revised to rank multiple days training higher than course content. It is possible to conclude that even a two-day conference could contain more valuable training than an unspecified amount of content in a course. Further research would be required to explore the possible reasons for the means of inservice training <1 day being higher than the means for 1 day of training in regard to accidents, alcohol/drugs, and disaster related crises.
Limitations

Several limitations of this study should be considered when interpreting results and planning future investigations:

(1) The sample for this study is a recruited sample, therefore results are not statistically generalizable to school counselors as a whole.

(2) Because counselors were asked to report numbers for incidents for the past three years and a percentage for time spent in crisis intervention and it is not known whether these counselors keep records of these two topics, it can be assumed that participants gave approximate numbers for these answers.

(3) Participants who volunteered to be part of a study relating to crisis intervention are likely to have a previous interest in the topic and may have more training and/or experiences than the typical school counselor.

(4) Participants could be assumed to be more comfortable with electronic communication methods than non-participants, another issue that negatively impacts generalizability of results.

(5) Data were collected during the month of June and could have been influenced by variations due to the ending of the school year. In addition, results may have been impacted because some counselors who had agreed to participate do not access their email during summer and did not receive notice for that reason.

(6) The lists of crisis situations and training topics in the survey are by no means exhaustive and may have left out additional crucial topics.
Recommendations for future research and counselor education

Several suggestions for future research resulted from this study:

(1) Repeating the survey at different times during the school year or as a year-long study in order to increase the amount of data collected.

(2) Repeating the survey with a random sample of school counselors, making the results generalizable to the population of school counselors as a whole.

(3) Research to aid in establishing a basis of demographic information about school counselors in the United States.

(4) Additional research regarding school counselors' utilization of technology.

(5) Exploring the content, quality, and effectiveness of crisis intervention training provided to school counselors.

(6) Exploring school counselor preparation programs' attitudes and content regarding crisis intervention training as a program component for CACREP (and/or non-CACREP) accredited programs.

(7) Further study of the crisis situations encountered by school counselors, counselors' effectiveness during crises, and differences that may exist resulting from demographic variables. This research could have important implications for designing training that is effective and relevant for counselors' school populations.

(8) Further examination of differences in preparedness and training according to demographic variables.

(9) Further examination of the relationships among training, experience and preparedness for crisis intervention.
(10) Evaluation of counselors' effectiveness during crisis situations, including comparison with their previous training and experiences.

(11) Additional questions for further study were presented by survey respondents in the qualitative section of the survey:

(a) Is there a demographic-based response for crises... do children react differently if they live in urban, suburban, or rural areas?

(b) What other experience in crisis intervention do school counselors have (such as suicide hot line volunteer)?

(c) How many counselors provide crisis training for their school staff? Does the district level staff provide training for the administration?

This study also yielded several recommendations for counselor educators and supervisors:

(1) Examination of crisis intervention related policy and program components in counselor education programs.

(2) Inclusion of crisis intervention courses in counselor education programs, a recommendation of participants in this study.

(3) Provision of additional crisis intervention training designed specifically for school counselors, a need supported by the findings of this study as well as those of Ballard (1995), Schonfeld and Kline (1994), and Tabasso (2001).

(4) Specific training for school counselors in Critical Incident Stress Debriefing.

(5) Specific training for school counselors regarding the topics for which the least number report feeling prepared: terrorism, assault with weapon on school grounds, homicide of staff member, and man-made disaster.
(6) Training that includes crisis simulations/drills, as recommended by the literature and by the findings of this study.

(7) Establishment of mentoring programs that would provide novice counselors opportunities to learn from veteran counselors about their crisis intervention experiences.

(8) One survey respondent made an additional suggestion:
Establish a well-funded and professionally staffed Child Mental Health/Trauma division of the newly established Homeland Security Department.

Summary

Chapter five included discussion of the findings of the study and comparison of these findings to previous research on school crisis intervention. This study produced new data regarding the training needs and frequencies of certain crisis events in the work lives of the respondents. It also produced new data regarding perceptions of preparedness for crises, including the finding that experience and training are both factors in participants' preparedness for crisis situations. Discussion of the limitations of the study was included, followed by a section describing recommendations for further research and practice in the field of counselor education.
References


Three teens in Colorado charged in plot to bomb school. (2001, December 28). The Roanoke


Appendix A:

Study Recruiting and Welcome Announcements

(1) Study Recruiting Announcement

In a few weeks an important study will be conducted regarding school counselors and crisis intervention. Your help is needed to gather information from as many practicing school counselors as possible. Participants will complete a short survey that will be posted on a website. If you are interested in participating in this valuable study and/or would like more information, please send email to cmathai@vt.edu with the word "survey" in the subject line. You will be contacted via email with instructions. All information regarding participants and their responses will be kept confidential. Thank you in advance for your help with this project!

(2) Participant Listserv Welcome Message (for participant who were added before data collection began)

Thank you for expressing interest in participating in this survey research project regarding school counselors and crisis intervention! My name is Christina Mathai (cmathai@vt.edu). I am a doctoral candidate in Counselor Education at Virginia Tech and a middle school counselor for several years. The survey is part of my dissertation work.

In response to your email note to me, I have added your contact information to the email list for the survey. I will use the list to send you information regarding completing the survey. Responses to the list will be received only by me, the researcher (cmathai@vt.edu). Your contact information and all other information about you will be kept confidential.
As the data collection period approaches, you will receive a reminder notice from me regarding the upcoming survey. A few days later, you will receive a message with the web site address for completing the survey, followed by three reminders before the end of data collection and a final notice when the survey is closed. The total time required for your participation is expected to be about 20 minutes.

I appreciate your willingness to assist with this important research and look forward to communicating with you over the next few weeks. If you have questions or concerns or would like to be removed from the list, please contact me at cmathai@vt.edu.

In addition, if you have school counselor colleagues who may be interested in participating, please cut and paste the following paragraph into an email note to them:

"ATTENTION SCHOOL COUNSELORS: PLEASE HELP!
In a few weeks an important study will be conducted regarding school counselors and crisis intervention. Your help is needed to gather information from as many practicing school counselors as possible. Participants will complete a short survey that is posted on a web site. If you are interested in participating in this valuable study, please send email to cmathai@vt.edu with the word "survey" in the subject line. You will be contacted via email with instructions. All information regarding participants and their responses will be kept confidential. Thank you in advance for your help with this project!"

In order to protect the validity of the research, it is very important that everyone who completes the survey is included in this list. Thank you very much for your help.

Sincerely,

Christina McGrady Mathai, Doctoral Candidate, Virginia Tech
Thank you for expressing interest in participating in this survey research project regarding school counselors and crisis intervention! Please read this entire note, it contains instructions for proceeding. My name is Christina Mathai (cmathai@vt.edu). I am a doctoral candidate in Counselor Education at Virginia Tech and a middle school counselor for several years. The survey is part of my dissertation work.

In response to your email note to me, I have added your contact information to the email list for the survey. I will use the list to send you information regarding the survey. Responses to the list will be received only by me, the researcher (cmathai@vt.edu). Your contact information and all other information about you will be kept confidential.

Data collection began on June 4 and will be open for 3 weeks, so you will have until June 25 to complete the survey. You may access the survey 24 hours per day, seven days a week during this time. The total time required to finish the survey is 20-30 minutes. I will be sending one reminder each week during the study in order to encourage responses. After you complete the survey once, please ignore the reminders. I will also send one announcement at the end of the study. You may complete the survey by using your web browser program (i.e., Netscape, Internet Explorer, etc.) to go to the survey page where you will find additional instructions. You will be prompted for the username and password number listed below:

The username is: anonymous

The password is: 4471

Following is the address for the survey. If it does not appear as a link, you may copy the web site address into your browser. http://www.filebox.vt.edu/users/cmathai
I appreciate your willingness to assist with this important research and look forward to communicating with you over the next few weeks. If you have questions or concerns or would like to be removed from the list, please contact me at cmathai@vt.edu. If you reply to this note, please make sure that your reply is addressed to cmathai@vt.edu.

In addition, if you have school counselor colleagues who may be interested in participating, please cut and paste the following paragraph into an email note to them:

"An important study is being conducted regarding school counselors and crisis intervention. Your help is needed to gather information from as many practicing school counselors as possible. Participants will complete a short survey that is posted on a web site. If you are interested in participating in this valuable study, please send email to cmathai@vt.edu with the word "survey" in the subject line. You will be contacted via email with instructions. All information regarding participants and their responses will be kept confidential.

Thank you in advance for your help with this project!"

In order to protect the validity of the research, it is very important that everyone who completes the survey is included in this list, so please do not forward the password information. Thank you very much for your help.

Sincerely,

Christina McGrady Mathai, Doctoral Candidate, Virginia Tech
Appendix B:

School Counselor Crisis Survey

Thank you for taking time to assist with this project. Please complete the survey only once.

- The survey includes 27 questions and should take 20-30 minutes to complete.
- You may use the scroll bar to move through the questions.
- For each question, use your mouse to click on the appropriate answer.
- For those questions that require you to enter a number or type your answer, use your mouse to click in the text box first, then begin typing.
- Please answer every question, incomplete surveys may not be included in the study.
- When you are finished, use your mouse to click on the submit button at the end of the survey. You will then see a page telling you that your answers have been submitted.

If you have questions or have difficulty completing the survey, please contact me at cmathai@vt.edu for assistance.

Please enter your email address below. This will be used to match your email address with the one on the survey email list and will not be reported with the results.

Questions 1 and 2 are about your crisis related experiences at school.

1. Please enter the number of each of the following crises that you have experienced at your school in the past three years (including this year). Enter zero for those crisis situations you have not encountered. For example, you may have experienced 4 incidents involving suicidal ideation, 0 incidents involving natural disaster, etc. Enter the number in the box under each line.

Suicide ideation

Suicide gesture

Completed suicide

Homicide of a student

Homicide of a staff member

Drug/alcohol fatality

Fatal accident involving a student
Fatal accident involving a staff member

School related accident or event involving multiple students (e.g., bus wreck)

Death from illness (e.g., cancer, diabetes, etc.)

Assault with a weapon on school grounds

Child physical abuse

Child sexual abuse

Rape

Sexual assault

Terrorism

Natural disaster (tornado, flood, etc.)

Man-made disaster (such as a factory explosion, dam collapse, etc.)

Criminal charges placed against a staff member

Other, please explain (10-15 words maximum)

2. What percent of your time do you estimate you spend working with crisis intervention or prevention in your school?

(Enter percentage here)______________________

Questions 3-13 are demographic questions. The information collected will be used to make comparisons among the data. Information collected will be kept confidential by the researcher and will not be shared in any way that could identify you.
3. What is your job title?
☐ School Counselor/Guidance Counselor
☐ School Social Worker
☐ School Psychologist
☐ Student
☐ Other: ____________________________

4. Do you hold a certificate in School Counseling/Guidance from your state Department of Education?
☐ Yes
☐ No
☐ Other, please explain: ____________________________

5. How many years (including the current school year) have you worked as a school counselor? Please mark only one.
☐ 1-5 years
☐ 6-10 years
☐ 11-15 years
☐ 16-20 years
☐ 20+ years

6. Please enter the state in which is your school located.
_____________________________________

7. In what setting is your school located?
☐ Rural
☐ Suburban
☐ Urban

8. Do you work in a public or private school?
☐ Public school
☐ Private school
☐ Other, please describe: ____________________________
9. Please indicate the grade levels of students you serve in your job. You may mark more than one.

☐ Elementary
☐ Middle
☐ High

Combined, please list grades __________________________

10. What is your gender?

☐ Female
☐ Male

11. Please enter your age (numerically).

___________

12. What is your ethnicity?

☐ African-American
☐ Asian/Pacific Islander
☐ Caucasian
☐ Hispanic
☐ Native American
☐ Other: __________________________

13. Are you a member of the American School Counselor Association?

☐ Yes
☐ No

Questions 14-27 are related to crisis intervention training. The final question asks for any additional input regarding school crisis intervention. I am interested in your opinion on this topic and encourage you to respond.

14. Which of the following types of crisis intervention training have you received? Please mark all that apply.

☐ Graduate level course in crisis intervention
☐ Crisis intervention content in graduate counselor preparation course(s)
☐ Multiple days training/conference
☐ 1 day training
Inservice training less than one day in length

☐ I have received no crisis intervention training

Other (please describe)

Congratulations! You have completed half the survey. Only 14 questions left.

15. Which of the following topics were covered in your crisis intervention training? Mark as many as apply.

☐ crisis theory

☐ psychological first aid

☐ assessment and referral

☐ age specific responses/effects of trauma on children

☐ stages of grief

☐ children's grief reactions based on age

☐ post traumatic stress disorder

☐ critical incident stress debriefing

☐ responding to violence

☐ suicide prevention and intervention

☐ suicide ideation lethality assessment

☐ legal and ethical issues in crisis intervention

☐ crisis simulation/drill

☐ none of the above

Other (please explain)

16. In regard to crises involving suicide, how prepared are you as a result of your training? (Check only one answer)

☐ Very well prepared

☐ Well prepared

☐ Adequately prepared

☐ Somewhat prepared

☐ Not at all prepared

☐ I have had no training regarding suicide

☐ Other, please explain
17. In regard to crises involving violence, how prepared are you as a result of your training? (Check only one)
- Very well prepared
- Well prepared
- Adequately prepared
- Somewhat prepared
- Not at all prepared
- I have had no training regarding violence
- Other, please explain

18. In regard to crises involving accidents, how prepared are you as a result of your training? (Check only one)
- Very well prepared
- Well prepared
- Adequately prepared
- Somewhat prepared
- Not at all prepared
- I have had no training regarding accidents
- Other, please explain

19. In regard to crises involving drugs/alcohol, how prepared are you as a result of your training? (Check only one)
- Very well prepared
- Well prepared
- Adequately prepared
- Somewhat prepared
- Not at all prepared
- I have had no training regarding drug/alcohol related crises
- Other, please explain

20. In regard to crises involving man-made or natural disasters, how prepared are you as a result of your training? (Check only one)
- Very well prepared
- Well prepared
21. Are you prepared for responding to the following crisis situations? Please mark each situation for which you believe you are adequately prepared (Check all that apply).

- Suicide ideation
- Suicide gesture
- Completed suicide
- Homicide of student
- Homicide of staff member
- Drug/alcohol fatality
- Fatal accident involving student
- Fatal accident involving staff member
- School related accident or event involving multiple students (e.g., bus wreck)
- Death from illness
- Assault with weapon on school grounds
- Child physical abuse
- Child sexual abuse
- Rape
- Sexual assault
- Terrorism
- Natural disaster (tornado, flood, etc.)
- Man-made disaster (such as a factory explosion, dam collapse, etc.)
- Criminal charges against a staff member
- Legal/ethical aspects of school crisis response
- None of the above

Other, please explain [_________]
22. What keeps you from working more effectively in crisis situations? (Check all that apply)

- [ ] Lack of training
- [ ] Lack of experience with crisis situations
- [ ] Lack of time
- [ ] Lack of community support
- [ ] Lack of administrative support
- [ ] Lack of assistance from others (such as teachers)
- [ ] Lack of assistance from district office
- [ ] Too few personnel to deal with crises
- [ ] Other (please describe)

23. Do you wish to have additional training in crisis intervention skills?

- [ ] Yes
- [ ] No
- [ ] Other

24. Please mark each of the following topics for which you would like additional training: (Check all that apply)

- [ ] Crisis theory
- [ ] Psychological first aid
- [ ] Assessment and referral
- [ ] Age specific responses of children/effects of trauma on children
- [ ] Stages of grief
- [ ] Children's grief reactions based on age
- [ ] Post traumatic stress disorder
- [ ] Critical incident stress debriefing
- [ ] Responding to violence
- [ ] Suicide prevention and intervention
- [ ] Suicide ideation lethality assessment
- [ ] Legal/ethical issues in crisis intervention
- [ ] Crisis simulation/drill
- [ ] None of the above
- [ ] Other (please explain)
25. How did you learn about this study? Check all that apply.

☐ Email from a colleague or supervisor

☐ Listserv

Other, please explain

26. Would you utilize the Internet to access school crisis intervention related information and/or training?

☐ Yes

☐ No

☐ I don't know

☐ Other, please explain

27. Please use the text box below to enter any additional information you believe is important for this study.


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Appendix C:

Pre-notice, Notice, Reminder, and Closing Notice

(1) Pre-notice

Dear School Counselors,

Thank you for your interest in participating in this survey research project regarding school counselors and crisis intervention! I'm sending this note to alert you that the study is about to begin.

The School Counselor Crisis Survey will begin in 2-4 days, by June 1 at the latest. The next communication you receive from me will be an announcement of the beginning of data collection. The note will contain a link to the survey site and instructions for completing the survey.

Data collection will be open for 3 weeks, so you will have 3 weeks during which to complete the survey. The site will be available 24 hours a day, seven days a week during the study. The total time required to finish the survey is 20-30 minutes. You will receive one note each week during the data collection as a reminder. At the end of the study, I will send a note alerting you that the study has concluded.

I look forward to getting your input for this research. If you have questions or concerns or would like to be removed from the study, please contact me at cmathai@vt.edu.

In addition, if you have school counselor colleagues who may be interested in participating, please cut and paste the following paragraph into an email note to them:

"ATTENTION SCHOOL COUNSELORS: PLEASE HELP!

In a few weeks an important study will be conducted regarding school counselors and crisis intervention. Your help is needed to gather
information from as many practicing school counselors as possible. Participants will complete a short survey that is posted on a web site.

If you are interested in participating in this valuable study, please send email to cmthai@vt.edu with the word "survey" in the subject line. You will be contacted via email with instructions. All information regarding participants and their responses will be kept confidential. Thank you in advance for your help with this project!

In order to protect the validity of the research, it is very important that everyone who completes the survey is included in this list. Thank you very much for your help.

Sincerely,

Christina McGrady Mathai, Doctoral Candidate, Virginia Tech

(2) Notice

Dear School Counselors,

After some delay due to technical difficulties, the School Counselor Crisis Survey is ready for data collection!

The survey is posted on a web site and will be accessible for three weeks, from today, June 4, until June 25, 2002. You may access the survey 24 hours per day, seven days a week during this time. I will be sending one reminder each week during the study in order to encourage responses. After you complete the survey once, please ignore the reminders. I will also send one announcement at the end of the study.

You may complete the survey by using your web browser program (i.e., Netscape, Internet Explorer, etc.) to go to the survey page. The first page gives instructions for accessing the survey.
You will be prompted for the username and password number listed below: The username is: anonymous. The password is: 4471. The following link should take you directly to the survey page: www.filebox.vt.edu/users/cmathai. If it does not, you may copy the web site address into your browser.

Once again, thank you for your participation in this important study. If you have questions or wish to be removed from the survey list, please contact me at cmathai@vt.edu.

I look forward to getting your input on the survey,

Christina McGrady Mathai

(3) Reminder Notice

Dear School Counselors,

This note is simply a reminder notice that the School Counselor Crisis Survey is still open (until June 25). If you have not yet completed the survey, you may do so by accessing the web site and entering the username and password. The username is: anonymous. The password is: 4471. You may use this link to access the site: http://www.filebox.vt.edu/users/cmathai. To those of you who have already completed the survey - THANK YOU! I appreciate your assistance with the project.

In addition, I am collecting contact information from participants who are interested in getting the results of the survey. I plan to have results available a couple of months after the survey is completed. If you are interested in getting the survey results, please send me (cmathai@vt.edu) an email with "results" in the subject line and I will contact you with the results later.

As usual, if you know of other school counselors who may be interested in participating in the study, please email them the following paragraph (not the address, username or password,
"My name is Christina Mathai, I am a doctoral candidate in Counselor Education at Virginia Tech and a middle school counselor for nine years. In a few days, I will be conducting an internet-based survey of school counselors as part of my dissertation research. The topic of the survey is crisis intervention. This project has been approved by the Institutional Review Board (Human Subjects) of Virginia Tech. Your help is needed to gather information from as many practicing school counselors as possible about their experiences and training related to crisis intervention. Participants will complete a short survey that is posted on a web site. If you are interested in participating in this important study and/or would like more information, please send e-mail to cmathai@vt.edu with the word "survey" in the subject line. You will then be contacted via e-mail with instructions. All information regarding participants and their responses will be kept confidential. Thank you in advance for your help with this project!"

Thank you very much for your help with this project,

Christina McGrady Mathai

(4) Second Reminder and Closing Notice

Dear School Counselors,

This note is the final reminder notice that the School Counselor Crisis Survey will close tomorrow evening, June 25, at midnight. If you have already completed the survey, thank you - you need not respond to this note. If you have not yet completed the survey, please do so by accessing the web site and entering the following username and password. The username is: anonymous. The password is: 4471. You may use this link to access the site:

http://www.filebox.vt.edu/users/cmathai.
I deeply appreciate your interest and assistance with this project. The response has been even more positive than I expected. I look forward to analyzing and sharing the results. I am compiling a list of participants who are **interested in getting the results** of the survey. I plan to have results available a couple of months after the survey is completed. If you are interested in getting the survey results, please **send me (cmathai@vt.edu) an email with "results" in the subject line** and I will contact you with the results later.

Thank you very much for your help, I wish you all the best in your school counseling career.

Sincerely,

Christina McGrady Mathai
Curriculum Vitae

Christina M. Mathai

P.O. Box 392, Blacksburg, VA 24063
540-449-7083 or 540-951-4256
cmathai@bev.net

Education

Ph.D., Counselor Education, Virginia Tech, Anticipated September 2002
Dissertation: Surveying School Counselors via the Internet Regarding Their Experiences and Training Needs in Crisis Intervention

M.A., Education, Student Personnel Services, Virginia Tech, 1995
Virginia licensure in Elementary and Middle School Counseling

B.S., Family and Child Development, Human Services, Virginia Tech, 1989

Employment Experience

Graduate Assistant, Virginia Tech, August 2000 to May 2002
Performed duties as assigned by the Counselor Education Program Area: individual clinical supervision of master's level counseling students, assisting with teaching master's level counseling courses, program design and implementation, and participating in research and writing activities. Member of the planning and coordination team for the new Virginia Tech Counselor Education lab at the Roanoke Higher Education Center.

Research Associate, Evaluation of Counseling Program, Roanoke Valley Governor’s School for Science and Technology, Roanoke, VA Spring 2001
Prepared, designed and implemented an evaluation of the school counseling program at a specialized secondary school of mathematics, science and technology. Planned and conducted subject selection and focus group interviews with students, parents and teachers. Conducted data analysis and wrote research report and recommendations.

Research Assistant, Evaluation of Counseling Program, Fall 2000
Interviewed and collected data for evaluation of secondary level school counseling program for the Bedford County, Virginia public schools.

Counselor, Montgomery County Schools, Christiansburg, VA 1995-2000
Served as counseling department head for a staff of four and a student body of approximately 900 students in grades 6-8 at Blacksburg Middle School. Responsible for planning, implementing and evaluating guidance and counseling programs and coordinating school 504 Program. Conducted individual and group counseling, classroom guidance, career counseling and
Employment Experience (continued)

crisis counseling. Provided consultation to parents, staff and area professionals. Chaired Child Study Committees. Served as liaison between the school and parents, community organizations and local agencies. Served as on-site supervisor for three master’s level counseling interns and two practicum students. Served on BMS Crisis Team (wrote school crisis plan), BMS Biennial Plan Committee, Blacksburg Strand Middle School Planning Committee, MCPS Standards of Accreditation Policy Committee, and Chair of Advisory Program Planning Committee.

Counselor, Roanoke City Public Schools, Roanoke, VA 1991-1995
Served as counselor in the Student Assistance Program. Provided counseling, education, and early intervention regarding alcohol and other drugs for students in two middle schools. Conducted individual and group counseling, crisis counseling, classroom education and faculty in-service. Coordinator for Magnet Extended Day Program. Coordinated planning and training for Peer Mediation Program.

Substance Abuse Prevention Specialist, Wytheville, VA 1990-1991
Provided needs assessment, training, education and consultation to agencies, schools, civic organizations, churches, and other Board programs. Received intensive training regarding substance abuse issues. Conducted education/support groups for children of substance abusing parents in various settings, including a domestic violence shelter. Developed and cataloged resource library. Co-wrote grant and administered funds for a program to support drug-free youth. Designed and implemented week-long summer Day Camp for children of substance abusing parents.

Conference Presentations

Students in a Gifted and Talented Program-
Stepchildren of the School System
American Counseling Association World Conference, New Orleans 2002

The School Counselor’s Role in Dealing with Sexual Harassment
Virginia Counselors Association Annual Convention, Richmond 2001

Individuals with Developmental Disabilities: School Role in Sexuality Issues,
The School Counselor’s Role in Addressing Sexual Harassment
Virginia School Counselor Association Conference, Charlottesville 2001

Bullying in the Schools
Virginia Counselors Association Annual Convention, Roanoke 2000

Supervision Course via Interactive Television
Technology in Counselor Education
Counselor Ed. and Supervisors Conference, Wake Forest University 1999
Honors

- Virginia Tech Hoppock Scholarship 2002
- President, Virginia Tech Chapter Chi Sigma Iota 2000-2001
- Rising Star Award 2001, for the donation of Professional Services to the Pro Bono Counseling Program of the Mental Health Association of the New River Valley
- Association for Specialists in Group Work Peg Carroll Scholarship 2001
- Certificate of Appreciation, New River Valley Community Services for significant support in addressing the mental health, mental retardation and substance abuse needs of citizens in the New River Valley 1998

References

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