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Effective Crisis Intervention in the School: The Role of Training, Experience, and Self-Efficacy on School Psychologists' Ability to Intervene

Erica J. Deming

Rochester Institute of Technology
Effective Crisis Intervention in the School: The Role of Training, Experience, and Self-Efficacy on School Psychologists' Ability to Intervene

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Of the School Psychology Program

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By

Erica Deming

In Partial Fulfillment of the Requirements
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Approved: Scott P. Merydith

(committee chair)

Jennifer Lukomski

(committee member)

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Abstract

School psychologists’ graduate and post-graduate preparation, intervention experience, and self-efficacy regarding crisis intervention services were investigated. A national survey was mailed to members of the National Association of School Psychologists (NASP) that resulted in a return rate of 38%. Demographic statistics indicated that a majority of school psychologists received at least some preservice crisis intervention training; however, 82.6% do not feel that this adequately prepared them to provide crisis intervention. Experience ratings suggested that school psychologists have little to no experience with gangs, weapons, gun control, natural disasters, and dealing with the media during a crisis. Children’s dealing with the divorce of their parents is the crisis event that a majority of school psychologists encounter regularly. Self-efficacy ratings suggested that a majority of school psychologists are at least somewhat confident providing crisis intervention services and that they are most confident providing crisis intervention related to individual crises. A significant positive correlation was observed between preparation and self-efficacy and between self-efficacy and experience. Regression analyses revealed that self-efficacy acts as the mediator between preparation and experience. Results support self-efficacy theory and its development through training and experience.
Effective Crisis Intervention in the School: The Role of Training, Experience, and Self-Efficacy on School Psychologists’ Ability to Intervene

Over the past couple of decades and especially very recently, the field of school psychology has begun to adapt to the increased need for crisis intervention in schools. Roles that once included little more than standardized testing, counseling, and some consultation have broadened to include direct intervention, including crisis intervention, systems/organizational consultation, and program evaluation (Reschly, 2000). Furthermore, it is speculated that an even wider variation in roles can be expected to emerge during the next decade. It is projected that school psychologists will continue to devote at least one-half of their time to at-risk or disabled populations but that school psychologists will be expected to employ intervention-centered assessments with greater emphasis on direct problem solving and consultation (Reschly, 2000). With the current state of violent acts, terrorism, war, and other crisis-related events, there is no doubt that crisis intervention will continue to infiltrate into our schools. School psychologists are and will continue to be in a position to adapt to the changing mental health needs of our children and will be continuously called upon to provide crisis intervention services.

As the roles and responsibilities of school psychologists continue to adapt, the question arises as to whether or not, or to what degree, school psychologists are receiving the training necessary to deal effectively with crises. Previous training curriculum for school psychologists focused little on crisis intervention. It is unclear even today if school psychology students receive appropriate preparatory training. In addition, little is known about how intervention experience or one’s perceived capability to intervene in a crisis impacts the delivery of crisis intervention
services. Clearly, as professional paradigms change with the growing demands of today's youth, research must remain current and relevant.

A Brief History of Crisis Intervention

Crisis Intervention theory is a relatively recent field of study, stemming back only about fifty years. The earliest work in the area of crisis intervention is typically attributed to Erich Lindemann, a social scientist, who researched the effects of a devastating nightclub fire in the 1930's. He was one of the first in the field to systematically observe the effects that such an unexpected trauma had on individuals; through his research he was able to begin to develop crisis theory (Sandoval, 2002). It was also Lindemann who opened a mental health facility in Massachusetts, allowing him to conduct further research in the field of crisis intervention.

Following the pioneering research of Lindemann, Erik Erikson published Childhood and Society in which he laid the groundwork for his developmental crisis theory (Sandoval, 2002). Combined with his well-known stages of child development, Erikson introduced the notion of crises occurring at each stage of development, and that, through the crisis, humans have the opportunity to grow. He normalized transitional crisis events and viewed them as necessary and therapeutic to healthy social-emotional development.

Gerald Caplan began his work in the mid twentieth century (Baldwin, 1979). At this time, there was little interest in the field of crisis intervention, and Caplan served to carry out the work of Lindemann using a theory of crisis intervention that continues to be used today. Caplan operationalized a crisis as a period of time when an individual is temporarily out of balance. Furthermore, he characterized a crisis as:
“Psychological disequilibrium in a person who confronts hazardous circumstance that for him constitutes an important problem which he can, for the time being, neither escape nor solve with his customary problem solving resources.” (Sandoval, 1988).

It was also Caplan that introduced to the field of mental health the notion of preventative services and public mental health services (Sandoval, 2002). Looking ahead to today’s mental health system, Caplan’s work helped to lay the groundwork for future perspectives and practices.

Since Lindemann, Erikson, and Caplan’s work first appeared in the field of crisis intervention, numerous psychologists and social scientists have researched the effect of crisis situations on the human condition. Over the years there has continued to be the assimilation of mental health awareness into communities, including schools. Advances in the field of mental health also introduced crisis-induced psychiatric states such as Post Traumatic Stress Disorder that, prior to the 1980’s and 1990’s, were never formally accepted into the field. The notion of brief mental health interventions, including crisis intervention, has also become increasingly accepted. The conviction that substantial progress can be accomplished in only a brief period of time lends itself well to the mental health services delivered to children in schools. Lastly, recent acts of violence and terrorism in our nation and around the world have continued to drive the need for widespread availability of crisis intervention services. Nowhere is this truer than in today’s schools.

An Understanding of Crisis

While crisis intervention services typically provided by school psychologists take many forms Sandoval (2002) has illustrated several key components of crisis intervention services that occur in a counseling milieu initially identified by Moos and Schaefer. First, the practitioner or school psychologist engages with the individual to recognize the significance of what has occurred. Secondly, the school psychologist and the student confront the situation and, together, face the
reality of the situation. The school psychologist then usually works with the individual to recognize and utilize the external support system available to them. Establishing and maintaining an emotional equilibrium is also an essential task of the school psychologist. Lastly, instilling a sense of competence and mastery in the individual is the task of the school psychologist during and after a crisis has occurred. This serves not only to re-establish feelings of self-worth and mastery that are often depleted during a crisis, but also to prepare the individual for future crises.

Types of Crises

As previously discussed, school psychologist are often required to respond to a variety of crises that affect individuals and their families, school communities, and even towns, states, or nations. Baldwin (1978) has developed a series of crisis classes. The following list is not meant to provide the reader with a complete and exhaustive explanation of all crisis categories; rather, it is intended to provide a brief explanation with examples more commonly encountered in schools.

Dispositional Crises

A lack of information to solve the particular problem independently. Examples include counseling parents about special education or helping an adolescent locate a support group.

Anticipated Life Transitions

Expected, normal events such as entering school, birth of a sibling, or teenage pregnancy.

Traumatic Stress

Unexpected and often emotionally overwhelming events. Examples include terminal illness or sudden death, divorce, or abuse.
Maturational/Developmental Crises

Especially apparent during adolescence, previously unresolved conflicts have developed into a form of crisis. Examples include sexual identity conflicts or responses to authority figures.

Crisis Reflecting Psychopathology

As the name suggests, these are crises that are often triggered by existing psychopathologies. Typically, while the school psychologist may serve to identify and immediately intervene, a mental health referral is required. Examples include eating disorders, depression, or uncontrolled aggression.

Psychiatric Emergencies

Examples of psychiatric emergencies include suicidal ideation and drug abuse or overdose and often result in suspected or actual danger to the individual. Within a school environment, these types of crises are also often referred to medical or psychiatric services.

Self-Efficacy

According to Albert Bandura (1980), self-efficacy is the internal, cognitive mechanism that is employed whenever an individual executes a particular task. In other words, when faced with a task, an individual assesses the degree to which they feel they are capable of completing the task, makes determinations regarding their perceived level of competence, and constructs inferences about the consequences or results of completing a particular task (Norfleet, 1998). Bandura states that, to measure perceived self-efficacy, “…people are asked to judge whether or not they are capable of performing various activities.” (Bandura, 1982).
According to Bandura (1982), one’s judgment of his or her self-efficacy is based upon four main sources of information: one’s previous experience with the behavior, previous vicarious experiences of viewing others completing a related behavior, peer reinforcement and assurance, and physiological input such as arousal levels. This conceptualization of self-efficacy judgements provides the field of crisis intervention with a great deal of information. First, it appears that previous experiences, related also to training, will impact one’s self-efficacy judgment. Formal and comprehensive training accompanied by previous successes is likely to raise self-efficacy judgments. However, Bandura also noted that self-doubts typically have the effect of increasing knowledge and learning but hinder actual behavior of learned skills (Bandura, 1982). In this instance, one might have received comprehensive training in crisis intervention, but may have very little intervention experience and expectedly low self-efficacy ratings. Conversely, those who appear very self-efficacious may spend less time seeking training or learning opportunities (Bandura, 1982); this could manifest itself by fewer professional development trainings. Vicarious experiences of watching others complete a similar task also contribute to self-efficacy; no more is this more salient than in practica and internship experiences. Lastly, physiological states are significant to consider, especially in the field of crisis intervention. Faced with unexpected situations, one’s arousal will typically increase and can sometimes lead to perceptions of increased vulnerability and decreased performance (Bandura, 1982).

Embedded within social learning theory, self-efficacy is often viewed as a component of human behavior, but is not a sole determinant (Kazdin, 1978). Rather, one’s training or skills as well as related incentives also contribute to a holistic view of self-efficacy theory and of behavior. As researchers set forth to measure self-efficacy, training and skill levels are relatively
straightforward as opposed to the notion of incentives or external motivators. Many school psychologists practice a code of ethics established by the National Association of School Psychologists (NASP) and American Psychological Association (APA) which would at least partially account for the concept of incentives; it is presumed that school psychologists strive to provide services to children and families and that, above all else, to do no harm. Other, related incentives likely include job security and peer approval.

While self-efficacy research, especially how it relates to the identified concern, is quite limited, Norfleet (1998) conducted a study to determine the role of self-efficacy, experience, and efficacy expectancy on different situation responses involving grief and loss among school support staff. Results of this study found a correlation only between self-efficacy and efficacy expectancy.

**Demographic Characteristics, Professional Practices, and Training Needs**

Current information about the identified population and about their professional practices is essential if we are to begin to understand the role of crisis intervention services. In an attempt to obtain current demographic and professional practice information, Curtis, Walker, Hunley, and Baker (1999) recently completed a survey of a small sampling (20%) of NASP members. More than 70% of all respondent reported being more than 40 years of age and almost one quarter of the sample was over the age of 50. Expectantly, a majority of school psychologists were trained 15 years ago or more. Nearly 80% of respondents reported that they held a specialist-level graduate degree or higher. Interestingly, a study conducted approximately 30 years ago (Farling and Hoedt, 1971) reported that only 4% of the practicing school psychologists held a specialist-level degree. The majority of school psychologists included in the study reported that they engage in the delivery of both direct and indirect services such as counseling,
consultation, and inservice presentations. In summary, results of this survey imply that, while educational standards for this profession appear to have improved in recent decades, a majority of practicing school psychologists was trained at a time when current professional issues, such as crisis intervention, may not have been included in specialist-level programs.

Reschley (2000) has contributed to our understanding of the present and tentative future of school psychology in terms of demographic characteristics as well as professional practices and roles. He suggested that, based upon historical trends, we can expect a continued increase in the average age of practicing school psychologists. Despite previous predictions that more school psychologists will seek doctoral degrees, Reschley commented that this shift is unlikely to occur in the near future as training programs rarely offer such options. In addition, the shortage of school psychologists that has occurred in recent decades appears to continue which undoubtedly impacts service delivery. Lastly, Reschley remarked that school psychologists continue to spend a great deal of time conducting evaluations, and that, while the nature of assessments have shifted somewhat, the paradigm shift from assessment to intervention has been slow.

In perhaps the most well known survey completed in the field of crisis intervention, Wise, Smead, and Huebner (1987) explored the involvement and training needs of school psychologists. In the area of crisis intervention as it applies to school psychologists, this report detailed the first research completed in the area. Prior to its completion, no empirical data existed regarding the needs and activities appropriate to the role of a school psychologist. So, while this study does not lend itself to previous research in the area, it came at a time when crises were becoming more prevalent in school settings and when the role of the school psychologist was being questioned. The purpose of the study was to determine (a) crisis events that school
psychologists intervened with (b) school psychologists’ perceived ability to handle the crisis with which they were faced (c) school psychologists’ interest in learning more about crisis intervention, and (d) the extensiveness of previous training in crisis intervention.

A survey with items created by Wise et al. (1987) was mailed to a random sample of 500 NASP members, 193 of which were used for analysis. Results indicated that 23% of the respondents had no formal training in crisis intervention, and that only 8% had had a course devoted entirely to crisis intervention. Respondents reported that, of the 31 events listed on the survey, the most frequently encountered crises included failing a subject, child abuse, parental divorce or separation, student problems with a teacher, repeating a grade, parent/child problems, and moving. The mean number of occurrences per semester was 9.8. The greatest training needs, of those crises experienced most frequently, were reported to be in the areas of child abuse, parent/child problems, and divorce. Respondents also reported training inadequacies in the areas of drug and alcohol problems, suicide, and dealing with a child with a terminally ill or injured parent. Lastly, data analyses indicated that survey participants felt most prepared to deal with frequently encountered crises as opposed to crises whose occurrences were rare.

Regional demographics obtained in this study were not necessarily representative of the population of NASP members, a confounding variable which threatened the external validity of the study. In addition, while Wise et al. (1987) reported on the previous training of school psychologists and then on the types, frequencies, and perceived adequacy of dealing with crisis situations, they did not examine the role of experience on any of the variables. Instead, they only reported that respondents felt most adequately trained to deal with those events they encounter most frequently.
At the time that this research was completed, this survey data provided the first real glimpse into the crisis intervention training needs of school psychologists. It successfully demonstrated a growing need for increased training and a definite feeling of inadequacy for many school psychologists in dealing with crisis intervention. Seventeen years ago, most of the crises faced by school psychologists dealt with either academic difficulties or parent and family issues. Without implying that those are no longer frequent or important issues in today’s schools, it has become obvious that today’s school psychologists are now dealing not only with those crises but also with school and national violence among other things. So, while the data was significant at the time at which it was collected, it is somewhat dated when compared with the type of crises, training needs, and perceived intervention adequacy of today’s school psychologists.

A national survey was recently completed (Allen et al., 2002) to determine the perceptions of school psychologists in the area of crisis intervention training. Specifically, the authors were interested in investigating university training of school psychologists, current involvement with crisis intervention, and continued professional development. Results suggested that while there has been an increased level of crisis intervention training in school psychology graduate programs, there still exists an immediate need for more extensive training.

This survey was an excellent follow up to the Wise et al. (1987) survey of school psychologists as many of the survey components were similar, which allowed Allen et al. to draw inferences about the changing training needs of school psychologists. They did not however, examine the frequency or types of crisis situations encountered, nor did they explore the role of self-efficacy or perceived competence in dealing with crisis situations on the frequency or types of interactions that school psychologists have in crisis intervention.
Larson and Busse (1998) conducted a survey regarding current training practices of specialist-level school psychology programs. More specifically, they were interested in determining the level and scope of training in the areas of violence and gang prevention. Whereas practicing school psychologists completed the previous surveys, the chairpersons of specialist-level training programs acted as respondents for this survey. Results of the survey suggest that the majority of training in crisis intervention is focused on behaviorally based problems and less emphasis is being placed on issues of gang prevention and intervention. The authors also investigated the connection between the training program’s vicinity to an urban area and increased focus on crisis intervention. Their hypothesis that programs in or near metropolitan areas are more likely to offer training in school violence and gang interventions was not supported.

The results of this survey suggest, to some degree, that school psychology training programs may not be fully adapting to the changing needs of today’s youth. As the authors point out, practicing school psychologists, whether or not they received appropriate training, are being called upon to provide such services. A further question that can be raised is, whether or not and where practitioners are receiving training?

Very recently, Bramlett, Murphy, Johnson, and Wallingsford (2002) distributed a national survey to school psychologists in an attempt to gain more information about the roles and typical referral problems faced by school psychologists. The purpose of this study was to determine the typical issues faced by today’s school psychologists, to find out more about school psychologist’s adherence to various consultation models, to measure the confidence with which school psychologists face consultation practices, to determine where school psychologists
receive their ideas for interventions, and to ascertain their involvement in school-based crisis teams.

Results indicated that the majority of respondents had over 20 years of professional experience and that only 10% of those that completed the survey had ten or fewer years of experience. The median school psychologist: student population served ratio was 1:1500, while NASP standards recommend a ratio of 1:1000. As previous literature has demonstrated, school psychologists stated that assessment took up 46% of their time and that consultation was the second most frequent activity at 16%. Respondents indicated that reading difficulties were the most common referral issues and that internalizing problems, not surprisingly, were the least common referrals. More school psychologists felt confident dealing with behavioral problems (76%) than academic concerns (68%). Regarding the source of information for interventions, most school psychologists stated that they relied on personal experiences most. Lastly, results indicated that 45% of respondents participated in crisis response teams.

According to the authors, results of this survey confirmed what previous research has indicated about the practices of school psychologists; professional practices have not changed very much over the past 10 years. Results of the survey, as they seem somewhat consistent with previous literature, open some doors for untapped future research in this area. Specifically, authors pointed out a need for research in the area of prevention and school safety as these topics seem to be becoming increasingly salient in our society.

**Conclusion**

After a review of the most well known surveys to date in this area, an updated survey has been developed to answer current questions regarding school psychologists' preparedness for crisis intervention. To date, no previous researchers have attempted to uncover the mechanisms
behind the crisis intervention services provided by school psychologists, namely the role of training, experience, and self-efficacy. Furthermore, very recently our nation has witnessed a surge of world and national level crises ensue, leaving many children and adults in a state of emotional crisis; terrorism, violence and war have created a fearful and anxious nation in which the mental health services that we are providing to children are of utmost importance. A survey exploring the school psychologist’s role in crisis intervention at this time may be able to provide the most up-to-date information in this field.

It is hypothesized that the years of experience a school psychologist has will be inversely related to the amount of graduate-level training received. It is suspected that a majority of training programs have only recently begun including crisis intervention training in response to national and international events. Related, it is also hypothesized that increased years of experience may be positively related to post-graduate training such as workshops and other professional development opportunities; the lack of graduate coursework combined with an increased need for crisis intervention services may lead more seasoned school psychologists to seek additional training. Lastly, it is hypothesized that results will suggest a positive relationship between preparation and self-efficacy, between self-efficacy and experience, and between preparation and experience, supporting self-efficacy theory.
Method

Participants

Survey participants included active members of the National Association of School Psychologists (NASP). Random selection was completed on behalf of NASP. A written request to NASP for the names and addresses of 500 members was placed and subsequently received via e-mail. Of the 500 members identified, 452 surveys were mailed. Of those, 178 were returned; 172 were suitable for statistical purposes, equating to a return rate of 38%. On the survey, participants were given the opportunity to provide their e-mail addresses as a way to receive survey results if interested. Each participant was mailed a survey and a postage-paid addressed envelope. No undeliverable surveys were returned.

Survey Form

The survey used in this study (see Appendix) was developed by the author for the purposes of this study. Some of the material, such as the list of crisis types included in Part II, was obtained in part from a review of available literature indicating prevalent crisis events encountered in schools. The beginning of the survey asked participants a variety of demographic questions, including years of experience, number of students in district, student to school psychologist ratio, regional location, and level of education. The second section of the survey asked participants to provide information regarding their training, both preservice and post-graduate. Included in this section was an item that asked for the participant’s perception of their preparedness. Following training questions, respondents were asked to rate their experiences with a variety of crisis events. Each item was rated using a likert scale from 1 (Not at all, never) to 4 (Often,
Frequently). Finally, participants were instructed to rate their confidence to effectively intervene for a variety of fictional crisis scenarios from 1 (Unable to intervene effectively; more training needed) to 4 (Extremely confident; an area of expertise).

Results

Demographic Variables

Participants were asked to report the number of years of experience as a school psychologist; the mean number of years was 19.86. The average number of students in participants’ districts of employment was 27,275.62. School types reported by participants were as follows: Suburban: 44.2%, Rural: 26.7%, Urban: 22.7%, and Other: 5.8%. Regional locations of respondents suggest adequate national representation: 32% Northeast, 23.3% Southeast, 23.3% North Central, 11.6% West Central, and 9.9% West.

Educational Characteristics and Related Training

Regarding levels of education obtained, 72.7% indicated that they had a MA/Specialist or MS/Specialist degree, 21.5% indicated a Doctoral degree, and 5.8% indicated Other. When questioned about their graduate coursework, 50% indicated ‘Some crisis intervention covered in some courses, but not extensively’, 29.1% indicated that they had received ‘No coursework or experience in practica or internships’, 12.2% responded that they had ‘Entire courses dedicated to crisis intervention’, and 7.6% indicated that they had ‘ Practica/Internship experiences only.’ Of the respondents that indicated ‘Entire courses dedicated to crisis intervention’, only 12.2% then identified course topics listed beneath that item. Due to the significantly low response rate on those items, valid conclusions cannot be drawn about specific coursework.
When asked, ‘Do you feel that your graduate-level training adequately prepared you to provide crisis intervention services?’ 82.6% indicated ‘no’ and 14.5% indicated ‘yes.’

Regarding post-graduate trainings, 67.4% of respondents indicated that they had received job training related to crisis intervention; 30.8% indicated that they had not.

*Experience with Crisis Intervention*

Participants were asked to rate their experience with a variety of crisis types using a likert scale. Respondents reported little to no experience with the following: dealing with the media during a crisis, gangs, weapons and gun control, and natural disasters. The majority of respondents indicated that they seldom had experience with the following crisis types: suicide, creating crisis plans, PTSD, war/terrorism, sexual abuse, physical abuse, grief/death, terminal illness, violence and aggression and drug abuse. Regular experiences were noted for the following crisis type: divorce. No crisis types were identified by the majority as occurring often or frequently.

*Self-Efficacy Ratings*

Participants were provided with a series of fictional crisis scenarios and asked to rate their level of confidence to effectively intervene using a likert scale. Given the scenario of an individual or personal crisis event, 55.8% indicated that they were confident, 21.5% indicated that they were somewhat confident, 20.3% indicated extreme confidence or that it was an area of expertise, and 1.7% indicated that they would be unable to intervene given that scenario. When a school-wide fictional crisis was presented to them, 41.9% indicated that they were somewhat confident, 36.6% reported that they would be unable to intervene, 18% indicated that
they were confident, and 3.5% responded that they were extremely confident or that it was an area of expertise. Lastly, when participants were given a scenario depicting a community crisis, 47.1% indicated that they were somewhat confident, 25.6% responded that they would be unable to intervene, 25.0% indicated that they were confident, and 2.3% reported extreme confidence.

Selected Intercorrelations Between Crisis Intervention Training and Experience with Crisis Events

A significant inverse relationship or negative correlation was found between years of experience and graduate-level crisis coursework ($r = -.214, \alpha = .01$); as the number of years of experience increases, reported crisis intervention coursework decreases. A significant negative correlation was also found between years of experience and school psychologists' perception of the adequacy of their preparation ($r = -.171, \alpha = .05$). The relationship between years of experience and post-graduate training, such as inservice presentations or workshops, was not significant ($r = .079$) and a significant negative correlation was found between years of experience and hours spent in professional development during the 2002-2003 school year ($r = -.163, \alpha = .05$).

Regarding respondent's ratings of their average experience with a variety of crisis events, a significant positive correlation was found between their graduate training and average experience rating ($r = .176, \alpha = .05$); however, level of education and crisis experience were not strongly correlated ($r = .128$). Participants' perceptions of preparedness were also not strongly correlated with their average experience rating ($r = .133$); those who feel more or less prepared appear no more likely to provide crisis intervention services. A significant correlation was found between average experience ratings and post-graduate training ($r = .262, \alpha = .01$), but was not significant
between average experience with crisis intervention and professional development hours

\( r = .101 \). To clarify the relationship between training and experience, an additional variable which included only the most frequently experiences crisis event was created. Some of the crisis experiences were clearly low incidence events in which a vast majority of school psychologists rarely encounter; while it is useful to have information about the frequency of these events, it was determined that these low incidence events might be disproportionately weighting the average experience rating. The crisis types included in this new variable were: divorce, violence and aggression, grief/death, physical abuse, and sexual abuse. The correlation between graduate-level training and the most frequent crisis experiences was significant \( r = .170, \alpha = .032 \) which indicates a slightly stronger relationships when we compare the relationship using average experience ratings to the relationship using more frequent experiences.

\textit{Selected Intercorrelations Between Crisis Intervention Training and Self-Efficacy}

When preparation for crisis intervention was compared to participants' self-efficacy ratings, a significant correlation was found between graduate-level training and average self-efficacy ratings \( r = .165, \alpha = .05 \), between respondents' level of education and average self-efficacy \( r = .309, \alpha = .01 \), between participants' perceptions of preparedness and average self-efficacy \( r = .245, \alpha = .01 \), and between post-graduate training and average self-efficacy \( r = .189, \alpha = .05 \). Self-efficacy ratings were also analyzed individually by personal crises, school-wide crises, and community-wide crises. While the majority of correlations held true, two observations were noted. First, while average self-efficacy and preparedness perceptions were significantly correlated, only school-wide and community crises remained significant when the
self-efficacy variables were isolated on the basis of type; the correlation between preparedness perceptions and self-efficacy for individual crises became insignificant ($r=.117$). Likewise, post-graduate training and average self-efficacy were significantly correlated, but when self-efficacy variables were isolated on the basis of type, the correlation between training and self efficacy related to individual crises was not significant ($r=.101$). Lastly, results indicate that there is not a significant correlation between hours spent in professional development trainings and respondents’ self-efficacy ratings ($r=.100$).

Selected Intercorrelations Between Self-Efficacy Ratings and Experience with Crisis Events

When participants’ self-efficacy ratings were compared with their experience, both in years and with specific crisis events, a significant correlation was found between average experience ratings and average self-efficacy ratings ($r=.547, a=.01$). A similar relationship was observed between the most frequent crisis experiences and average self-efficacy ($r=.458, a=.01$), but not between self-efficacy and years of experience ($r=.080$).

Regression Analysis for Variables Predicting Training and Self-Efficacy

As all three variables examined were correlated with one another, a regression analysis was performed to determine the degree to which we can predict training or self-efficacy variables given information regarding participants’ crisis experience. Results indicate that graduate-level training is not a significant predictor of experience ($a=.139$) and that total training (graduate and post-graduate) is also not a significant predictor of experience ($a=.061$). Participants’ average self-efficacy ratings are a significant predictor of experience ($a=.000$).
Discussion

Much of the demographic information obtained in this survey support previous literature. Results indicate that the average years of experience of the current population is nearly two decades. Previous researchers have noted an increasing trend in the age of school psychologists (Reschly, 2000), and although age was not included in this survey, we can make some valid inferences based on practitioner’s experience ratings. The data obtained from this survey suggests that the average school psychologist likely attended graduate training programs in the late 1970’s and early 1980’s. While this implies that many of the nation’s school psychologists are seasoned and knowledgeable practitioners with a host of valuable experiences, it also implies that this group of professionals attended training programs at a time in which crisis intervention was not emphasized nearly as much as it is today. This is supported by the fact that 37.1% reported no formal crisis intervention training as well as by the fact that 82.6% reported not feeling adequately prepared to provide crisis intervention services upon completion of graduate training. A majority of respondents reported that they have received some post-graduate training via inservice presentations or workshops.

A majority of school psychologists continue to be trained at the specialist level, although it does appear that nearly one quarter have obtained doctoral degrees. Reschly (2000) notes that an incorrect assumption was made approximately 20 years ago when it was predicted that the field of school psychology would see a dramatic increase in the number of practitioners obtaining doctoral degrees. Reschly notes in his article that, to date, this has not been the case; current survey results support his claim. Furthermore, it is speculated that school psychologists trained at the specialist level will continue as the mainstream population.
In conclusion, it appears that many of the demographic variables of the population sampled mimic the trends discussed in previous literature. In addition, it appears that a majority of respondents did not receive appropriate preparatory training and that training programs are just beginning to adjust to the growing demands for crisis intervention. On a positive note, it appears that many school psychologists may be compensating for their lack of appropriate training by seeking out additional training opportunities.

Participants’ experience ratings indicate that the only regularly encountered incident is divorce, which is somewhat expected given the prevalence of this event in our culture. A majority of school psychologists indicated seldom experience with a variety of incidences; most of the variables identified, namely physical and sexual abuse, grief and death, and PTSD, are typically individual in nature. When we consider how often these types of crises typically occur within a student body, and how often they are called to the attention of support staff such as school psychologists, it is expected that school psychologists would rate the experience as a seldom occurrence. School psychologists reported very little to no experience with several low-incidence crises such as natural disasters, gangs, and dealing with the media during a crisis.

Self-efficacy ratings suggest that school psychologists feel more confident providing crisis intervention for a personal or individual crisis as opposed to school or community-wide crises. This not only supports the experience ratings obtained, but also suggests that school psychologists may be more adequately prepared to provide such services. This could be due, in part, to the counseling training that is included in most training programs. Dealing with an individual during a crisis typically involves using counseling techniques; this is not always the case during widespread crises, which may call for additional techniques.
Participants reported less self-efficacy when presented with a community-wide crisis scenario. Based upon experience ratings, this could be due in part to the low-incidence nature of these types of crises. Participants reported the least amount of self-efficacy on school-wide crises such as school violence or staff or student death. While the cause for diminished self-efficacy on this variable is not known, it is speculated that it could be partially due to lack of experience. Additionally, role expectations associated with this type of crisis could have influenced self-efficacy ratings. When a crisis occurs that is contained within the school community, greater emphasis may be placed on the school psychologist to intervene. Conversely, given a community crisis, self-efficacy may be higher as the school psychologist would likely receive additional support during the crisis event.

When the relationship between respondents’ amount of experience and training in crisis intervention, both graduate and post-graduate, were examined, a significant inverse relationship was detected between feelings of preparedness and years of experience; those with less experience perceive themselves as more prepared. Those with less experience, such as newer graduates, have a greater tendency to rate their graduate-level coursework as adequate possibly due in part to increasing emphasis on crisis intervention in training programs. Conversely, seasoned school psychologists were more likely to indicate that their training program did not adequately prepare them to provide crisis intervention services. A similar correlation was also observed between years of experience and amount of crisis-related graduate coursework; this supports the claim that school psychology programs may be including more crisis intervention coursework into their curricula as societal demands increase. Furthermore, those with more experience as a school psychologist reported decreased attendance in professional development trainings. Given the information discussed above, this is concerning and is likely impacting the
crisis intervention services provided in our schools. Reasons, although not explored in this survey, may include time restraints, increased job demands, or lack of motivation to continue attending trainings. A significant correlation was observed between overall experience with crisis events and post-graduate trainings such as inservices or workshops. This could be interpreted a number of different ways. One possibility is that those engaging in additional trainings may be, in response to increased knowledge, willingly providing more services. Another possible interpretation is that those that recognize an increased need for crisis intervention services may be seeking out additional training to meet the demands of the population that they serve. Meaningful relationships were not seen between level of education and experience with crisis events; those with higher level of education appear no more likely to provide crisis intervention. Furthermore, preparedness perceptions were also unrelated to experience with crisis events. Lastly, the number of hours spent in professional development during the 2002-2003 school year was not correlated with crisis experiences. In summary, results of a variety of correlations between experience and training suggest that those with fewer years of experience are increasingly prepared to provide services and that those with increased crisis experience report greater involvement in post-graduate training.

When training was compared with respondents' self-efficacy ratings, graduate level training was strongly correlated with their ratings of self-efficacy, which suggests that increased preparation leads to increased self-efficacy. Ratings of self-efficacy were also strongly correlated with the level of education obtained; those with more advanced degrees reported greater self-efficacy. Furthermore, those who felt more prepared upon exiting their training program were increasingly self-efficacious. However, when feelings of self-efficacy were isolated based upon the type of crisis event, responses indicated that perceptions of preparedness
were correlated with school-wide crises and community crises, but not individual crises. This suggests that perhaps graduate training programs do not emphasize individual crises as much as school or community crises, or that participants rely on other types of training, such as self-study or workshops, for those types of crises. In summary, results of these correlations support what we know about Bandura’s self-efficacy theory as a determinate of human behavior.

Ratings of self-efficacy viewed collectively and in isolation, were strongly correlated with ratings of experience. Two possible implications arise from this data. One is that those with more crisis intervention experience are increasingly self-efficacious; continued intervention experience has lead to greater confidence or feelings of competence. Another possible inference is that school psychologists with greater self-efficacy are directly or indirectly seeking out more experiences to provide crisis intervention services. Perhaps appropriate training in combination with positive experiences with crisis intervention have given these professionals the confidence to provide such services. Ways in which they could increase their involvement include involvement on crisis response teams.

In his most recent statistical text, Howell (2002) identifies a mediator as a variable that mediates the relationship between two other variables. Requirements for a variable to be identified as a mediator include demonstrating statistical significance between the independent variable and the mediator and then demonstrating significance between the mediator and the dependent variable. Survey results indicate that a significant correlation exists between training received and self-efficacy, between self-efficacy and experience, and between training and experience. This fulfills Howell’s requirements and demonstrates that self-efficacy acts as a mediator between the other two variables.
Implications

Results of this study support what previous research has told us about self-efficacy acting as a mediator between preparation and experience and suggests that, in the absence of self-efficacy, preparatory training and hands-on experiences do not meaningfully contribute to crisis intervention services. This suggests that one of the many roles of graduate training programs should be to enhance the self-efficacy of their students. Based upon the current availability of research, it does not appear that the role of self-efficacy in training programs is an area that has received much attention to date. Future research should explore the ways in which training programs can assist in the development of self-efficacy in future school psychologists.

Information regarding the barriers to self-efficacy need also been explored.

Results also supports continued training for practicing school psychologists; it appears that those that have been in the field for longer are at an increased risk for not having appropriate crisis intervention training. Future research should target ways in which the field of school psychology can begin to cater to this population of school psychologists in terms of training. It is not enough to simply introduce crisis intervention training into graduate training programs due
to the number of school psychologists already practicing in the field and unlikely to return to formal education. Instead, we need to explore ways in which crisis intervention training can be delivered to this “at-risk” population.

Limitations
Concerning the survey itself, it would have been useful to gain more information regarding all three of the major variables measured. However, previous survey literature indicates that lengthy surveys are typically associated with lower return rates. For the sake of adequate sampling and representation, the decision was made to create survey that was as brief as possible while still maintaining the original intent of the study. Increasingly thorough information may have been gained through the use of a longer survey, a telephone survey, or simply a greater number of surveys mailed.

Regarding survey questions themselves, one question asked about the hours spent in professional development during the 2002-2003 school year. While it was expected that respondents would indicate hours specifically related to crisis intervention, the question did not indicate this specifically, which in turn could have lead to misleading data. Following the data analysis procedure, this variable turned out to be a relatively weak variable in comparison to the other training variables. The self-efficacy scenarios in which participants were asked to rate their confidence pose limitations only because of their specificity. The scenarios were created as fictional events but it is certainly possible that participants might have had a previous experience with something very similar to the scenario depicted. For example, the personal or individual scenario described a suicide intervention. It is possible that some respondents may be well versed in suicide intervention and prevention but less confident with physical abuse, divorce, or
deaths which are also considered individual crises. One possible way to overcome this limitation would be to have a variety of scenarios for participants to rate; again, for the sake of brevity, that was avoided in this study.

Lastly, participants were chosen based upon their active membership in the National Association of School Psychologists, a professional associated dedicated to upholding current psychological standards. While exact figures are not available, it is speculated that many practicing school psychologists are not active NASP members, thereby limiting the external validity of the survey results. However, as results of this study are based primarily on correlations, the relationship between the variables examined holds true despite the potential representation imperfections.
References


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Sandoval, J. (2002). 2nd ed. Conceptualizations and general principals of crisis counseling,


Table 1

*Selected Intercorrelations Between Crisis Intervention Training and Experience with Crisis Events*

<table>
<thead>
<tr>
<th>Crisis-Related Training</th>
<th>Graduate Training</th>
<th>Level of Education</th>
<th>Perceptions of Preparedness</th>
<th>On-the-job Training</th>
<th>Professional Development Hrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of Experience</td>
<td>-.214**</td>
<td>.051</td>
<td>-.171*</td>
<td>.079</td>
<td>-.163*</td>
</tr>
<tr>
<td>Avg. Experience Rating</td>
<td>.176*</td>
<td>.128</td>
<td>.133</td>
<td>.262**</td>
<td>.101</td>
</tr>
<tr>
<td>Top Experience Rating</td>
<td>.170*</td>
<td>.090</td>
<td>.120</td>
<td>.153</td>
<td>.075</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the .01 level (2-tailed).
*. Correlation is significant at the .05 level (2-tailed).
Table 2

Selected Intercorrelations Between Crisis Intervention Training and Self-Efficacy

<table>
<thead>
<tr>
<th>Crisis-Related Training</th>
<th>Graduate Training</th>
<th>Level of Education</th>
<th>Preparedness Perceptions</th>
<th>On-the-job Training</th>
<th>Prof. Dev. Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average SE</td>
<td>.165*</td>
<td>.309**</td>
<td>.245**</td>
<td>.189*</td>
<td>.100</td>
</tr>
<tr>
<td>SE: Individual</td>
<td>.062</td>
<td>.279**</td>
<td>.117</td>
<td>.101</td>
<td>-.001</td>
</tr>
<tr>
<td>SE: School-Wide</td>
<td>.188*</td>
<td>.154*</td>
<td>.255**</td>
<td>.152*</td>
<td>.072</td>
</tr>
<tr>
<td>SE: Community</td>
<td>.122</td>
<td>.294**</td>
<td>.184*</td>
<td>.175*</td>
<td>.151</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the .01 level (2-tailed).
*. Correlation is significant at the .05 level (2-tailed).
Table 3

**Intercorrelations Between Self-Efficacy Ratings and Experience with Crisis Events**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Years of Experience</td>
<td>.080</td>
<td>.118</td>
<td>.010</td>
<td>.066</td>
</tr>
<tr>
<td>Average Exp. Rating</td>
<td>.547**</td>
<td>.444**</td>
<td>.380**</td>
<td>.454**</td>
</tr>
<tr>
<td>Top Exp. Rating</td>
<td>.458**</td>
<td>.342**</td>
<td>.326**</td>
<td>.400**</td>
</tr>
</tbody>
</table>

**Correlation is significant at the .01 level (2-tailed).**

*Correlation is significant at the .05 level (2-tailed).*
Appendix

A Survey of Crisis Intervention

Instructions: Please check those items that best answer the question. You may skip any questions that you do not wish to answer and you may stop at any time. *If you are not currently a practicing school psychologist, please disregard.*

### Part I

Years of Experience as a school psychologist: ____

Student to School Psychologist Ratio: ____ : ____

Number of Students in District: ______

Type of school currently employed in:

- ___ Rural
- ___ Urban
- ___ Suburban
- ___ Private Practice
- ___ Other (please explain)

Regional Location:

- ___ Northeast
- ___ Southeast
- ___ West Central
- ___ North Central
- ___ West

Degrees and/or certificates held:

- ___ MA/MS/Specialist
- ___ Doctoral
- ___ Other (please specify)

Amount of *preservice* training related to crisis intervention services:

- ___ Entire courses dedicated to crisis intervention
  - ___ Personal/Individual Crises (abuse, etc.)
  - ___ School Crises (staff death, etc.)
  - ___ Community Crises (war, etc.)
- ___ Some crisis intervention material covered in some courses, but not extensively.
- ___ Practicum/Internship experiences only
- ___ No coursework or experience in practica or internships.

Do you feel that your graduate-level training (coursework or fieldwork) adequately prepared you to provide crisis intervention services?  ____ Yes  ____ No

Other training/experience related to crisis intervention services:

- ___ Job training at a building or district training
  - ___ Professional Workshops (NASP, etc.)
  - ___ On-the-job experience only

Hours spent in professional development during 2002-03 school year:______
Part II: Please rate your intervention experience with the following topics using the rating scale below:
1: Not at all, never
2: Seldom
3: Regularly
4: Often, Frequently

Suicide__
Creating crisis plans__
Dealing with the media during a crisis__
PTSD__
Divorce__
War/Terrorism__
Sexual Abuse__
Physical Abuse__
Grief and Death__
Terminal Illness__
Violence and Aggression__
Gangs__
Weapons and Gun Control__
Drug Abuse__
Natural Disasters__
Other________________

Part III:
For all scenarios below, please rate your confidence to effectively intervene using the scale below:
1: Unable to intervene effectively; more training needed
2: Somewhat confident
3: Confident
4: Extremely confident; an area of expertise

1. You are given a letter that a teacher found. The letter is from a student and you determine that it is suicidal in nature. You are asked by an administrator to intervene. _____

2. Your city/town has recently been the site of a devastating hurricane. Students and families that you serve have been directly or indirectly affected by this event. Your school principal has asked you to deliver a message to the student body as well as the media._____ 

3. A subgroup of students in your school have recently become involved in gang-related behavior that may or may not involve drug use, aggression, and crime. You are asked to form a counseling group with these students to address their activity._____

Thank you for completing this survey; please return it in the enclosed postage-paid envelope. If you are interested in receiving the results of this survey, please provide contact information.
E-Mail Address: ___________________