

**Perceptions of Preparedness for a Major School Crisis:**

**An Evaluation of Missouri School Counselors**

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## **Abstract**

A major school crisis can cause physical and emotional distress as well as impact student academic performance. The purpose of this study was to use a web-based survey to explore Missouri school counselors' perceptions of individual and school-wide crisis preparedness and crisis training experiences. Results indicate that the more involved school counselors are in the crisis planning process the more prepared they feel. By understanding the differences in school counselor crisis preparedness perception and their involvement in crisis planning, educational institutions can design and target training to increase effectiveness and improve disaster response.

*Keywords:* school preparedness, school counselors, school violence, crisis preparation

## **Perceptions of Preparedness for a Major School Crisis: An Evaluation of Missouri School Counselors**

School violence is a growing problem and school safety an increasing concern. According to the 2011 Youth Behavior Risk Surveillance Survey (YBRSS), a national school-based survey conducted by the Centers for Disease Control and Prevention (CDC), 5.4% of high school students reported bringing a gun, knife or other weapon to school (CDC, 2012). Over 20% of students reported being bullied, 7.4% said they had been threatened or injured with a weapon, and 12% were engaged in a physical fight on school property during the year prior to the survey. With these statistics, it is no surprise that 5.9% of students reported staying home from school at least once in the 30 days prior to the survey because of safety concerns (CDC, 2012). School violence attacks have occurred in rural, suburban and urban school districts, affected different grade levels, and required a physical and psychological response to help students and school staff recover.

Missouri has not been immune to the violence. There have been crisis situations in both rural Joplin and urban Kansas City. Data from the 2009 YRBSS, which was collected nationally and can be categorized at both national and state levels allows for comparison of violence statistics. This survey report illuminates the threat of violence reporting that 22.8% of Missouri students have been bullied on school property, two points higher than the national average (CDC, 2012). Missouri students mirrored the national average in other violence categories, revealing a need for school personnel including school counselors to prepare for crisis. Therefore, the goal of the current study

was to explore Missouri school counselors' perceptions of school crisis preparedness using a web-based self-report survey.

The YBRSS statistics highlight the reality of violence in Missouri schools. These statistics illustrate the need for school counselors to prepare to handle the emotional and physical disruption caused by school crises. However, student violence is not the sole definition of school crisis. Schools must also train and prepare for outside attacks and natural disasters. For the purpose of the current study, a major school crisis is defined as an event that threatens or causes physical harm to multiple individuals causing them to experience strong emotional reactions that interfere with usual coping skills (Missouri Department of Elementary and Secondary Education (DESE), 2005). Crisis events happen suddenly and are highly disruptive, time limited and public (James & Gilliland, 2001, Mascari, 2002; Myer, 2001; Schlozman, 2001). They can include natural forces such as earthquakes and hurricanes, as well as unpredictable acts of human violence such as terrorism and school shootings (Feinberg, 1998; Fremont, 2004; James & Gilliland, 2001; Myer, 2001; Vernberg & Vogel, 1993).

The physical and psychological distress caused by crisis events can affect students, teachers and staff (Heath & Sheen, 2005; James & Gilliland, 2001; Sprague & Walker, 2005), and cause a significant decline in student academic performance (Chibbaro & Jackson, 2006) as well as trigger an array of emotional and behavioral responses including temporary feelings of shock, fear, anxiety, grief, anger, helpless, confusion, and worry. Students experiencing psychological and emotional distress cannot achieve optimum levels of performance. However, when schools are prepared to

deal with crisis, children can continue to grow emotionally, intellectually, and physically (Heath & Sheen, 2005).

## **Background**

### **Self-Efficacy Theory**

According to Albert Bandura, self-efficacy is the belief that a person can control their situation and the events that impact their life (1993). Specifically, self-efficacy is the belief that one can successfully perform a desired behavior (Hepworth, Rooney, Rooney, Strom-Gottfried, & Larsen, 2010). Bandura's self-efficacy theory (1977) is derived from social cognitive theory (SCT). Self-efficacy is removed as a construct of SCT and established as an independent component of behavior change. The theory states that when individuals are faced with adversity personal self-efficacy guides the initiation of coping behaviors, and aids in sustainability efforts (Bandura, 1977). Self-efficacy theory refers to the expectation that an individual has the knowledge and skills as well as the capability to overcome problems and succeed under the stresses and pressures of life (Bandura, 1977). Individual self-efficacy is one's perceived level of confidence in skill development and practice (Bandura, 1993).

Self-efficacy theory consists of three constructs: efficacy expectation, outcome expectation, and outcome values (Bandura, 1977). Efficacy expectations are the beliefs that individuals can successfully perform a specific behavior required to achieve a desired outcome. Outcome expectations further increase self-efficacy. Once individuals believe they can perform a specific skill or behavior they are more likely to believe the behavior will lead to the desired outcome. The stronger one's efficacy expectations are, the more likely it is that the expectations refer to the belief that performing a specific

behavior will lead to specific outcomes. Outcome values are the worth or significance a person places on the expected outcomes of a specified behavior (Bandura, 1977). For example, a school counselor who feels confident in his or her ability to implement a certain crisis intervention model will be more likely to use that model in a crisis event (efficacy expectation). The counselor also believes the model will produce the desired effect, a healthy recovery (outcome expectation), which is an important and worthy outcome (outcome value). For the purpose of the current study, crisis preparation perception is related to crisis self-efficacy and defined as the awareness of an individual's or school's ability to respond to crisis events.

### **Role of the School Counselor**

School-based violence and other trauma is inevitable and school counselors are the frontline of psychological response and recovery (Allen, Burt, et al., 2002; Heath & Sheen, 2005; James & Gilliland, 2001; Mascari, 2002; Sprague & Walker, 2005; Trump, 2003; US Department of Education, 2001). To adequately respond, counselors must be prepared to deal with a variety of reactions, both short and long term, to crisis events (Gordon et al., 1999; Saylor, 1993). The action taken by the counselor is critical to the student's long-term well-being (Chibbaro & Jackson, 2006). The American School Counselor Association (ASCA) makes a clear statement about the counselor's role in crisis recovery stating that the counselor is a "pivotal member of the school district's critical incident response team" and a leader in crisis response and recovery (ASCA, 2000 p.1). However, Allen, Burt, et al. (2002), found that school counselors feel less than adequately prepared to deal with crisis situations even when they are familiar with the school's crisis plan.

## **Missouri School Counseling**

The Missouri school system utilizes the Missouri Comprehensive Guidance Model to implement guidance and responsive services (Gysbers & Henderson, 2000). With the implementation of the guidance model, counselors and school staff work to nurture the whole student including daily concerns and needs as well as those that might arise as a result of a crisis. Responsive services are one component of the comprehensive model. These services are geared toward preparing counselors to provide crisis counseling (Gysbers & Henderson, 2000). In addition to the guidance model, Missouri implements the 1996 Safe School Act which requires school districts to explicitly define their school violence discipline model and provide annual training reviewing the policy to all school staff. The combination of the guidance model, the Safe School Act, and highly publicized school violence led to the overarching research question; are Missouri school counselors prepared for a major school crisis?

There are 524 school districts with over 890,000 school children enrolled in public schools in Missouri, and over 2,700 school counselors, with at least one counselor for every public school district. Therefore, in the spring of 2005, the Missouri Department of Elementary and Secondary Education (DESE), in collaboration with the Missouri State Department of Mental Health, conducted a three question, open-ended survey to begin examining the needs of school districts and counselors when responding to critical incidents or school crises. Schools reported on those areas that did and did not work as well as those resources they felt were needed, but not available, during a recent critical incident. When asked about needs, many responses included training on individual roles, responsibilities, procedures and dealing with student

responses to crises (DESE, 2005 p.1). The current research expanded on the DESE study to explore the counselors' perceptions of school crisis preparedness and training. Specifically, this study explored differences in Missouri counselor perceptions of preparedness.

## **Methodology**

### **Study Design**

The goal of this study was to explore Missouri school counselors' perceptions of school crisis preparedness and crisis training experiences. A web-based, self-report survey was used to answer the following research questions and compare differences:

- (1) Do Missouri school counselors feel individually prepared for a major school crisis?
- (2) Do Missouri school counselors feel that their school is prepared for a major school crisis?
- (3) Do Missouri school counselors think crisis intervention preparation is important?
- (4) Do school counselors differ in their perceptions of individual and school wide preparedness for major school crises and the importance of crisis intervention preparedness?
- (5) What are Missouri school counselors' crisis intervention training experiences?

### **Sampling Procedure**

Purposeful, systematic sampling was used to identify Missouri school counselors as potential participants. Missouri DESE provided a list of 2,735 public school counselors. The public list included the counselor's name, school district, school address, school email, and school level. A random sample of every fourth counselor was used to obtain 685 potential participants. No email address was available for 31 of the counselors, leaving 654 Missouri school counselors who received the initial



recruitment email. Of those, 55 email addresses were returned as undeliverable, and one person requested to be removed from the study. A total of 598 school counselors received an invitation to participate.

The target population was school counselors serving public schools in the state of Missouri, who worked at any level; elementary, middle or high school; full- or part-time. At a minimum school counselors must hold a bachelor's degree; therefore, no one under the age of 18 was contacted. No one was excluded from the study based on race, ethnicity, gender or sexual orientation.

### **Data Collection**

The researcher used a 3-step recruitment procedure for contacting potential participants. Initial recruitment took the form of an email message that provided a short description of the research and a hyperlink to the survey instrument if the counselor chose to volunteer. A second email was distributed one week after the initial recruitment email, which served as a reminder notice for counselors who had not yet completed the survey, and as a thank you to those who had submitted the survey. Two weeks after the initial email message and one week post-second notice, a final notice was sent to the counselor list, which thanked those who participated and announced the closing of the survey twenty days after the initial invitation.

### **Instrumentation**

The survey instrument measured the perception of school counselor preparedness and crisis training experience and was constructed using principles of web-based survey design from Dillman's (2000) tailored design method. The investigator requested and received permission to develop the 25 question instrument

based on two previous surveys (Bigante, 2005; Mathai, 2005) which were based on instruments administered by Allen, Burt and colleagues (2002) and Allen, Jerome and colleagues (2002). The current instrument consisted of 23 closed-ended questions and two open-ended questions and investigated differences in three perceptual area scales (individual crisis preparedness, school-wide crisis preparedness and importance of crisis preparedness) and two descriptive categories (crisis intervention training experience and participant demographics) (see table 1). The individual counselor perception scale and the school-wide perception scale each contained four items, while the importance perception scale contained two items. All three perceptual scales required the participant to answer the items by using a 5 or 6-point Likert-type scale.

**Table 1**

*Survey Instrument Questions*

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1. How prepared are you to handle a major school crisis?
  2. How prepared are you to implement your school crisis plan if necessary?
  3. I am confident that I can assess whether a student is at risk for a crisis.
  4. How prepared do you feel as a result of the crisis intervention training you have received?
  5. How prepared do you feel your school is to respond to a major school crisis?
  6. How prepared do fellow school staff feel your school is to respond to a major school crisis?
  7. The crisis plan my school has is well developed and comprehensive.
  8. To what degree have you been involved in the creation of the school crisis response plan?
  9. How important do you feel it is to prepare for a major school crisis?
  10. How important is it to attend crisis intervention training?
  11. Which of the following types of crisis intervention training have you received?
  12. Which of the following topics were covered in your crisis intervention training?
  13. What training components have been helpful when responding to crisis events in your school?
  14. What do you need to feel more prepared in a major school crisis?
  15. Does your district or individual school have a crisis response plan in place?
  16. Does your district/school have a crisis team?
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17. Are you a member of the school crisis team?
  18. How often does your district or school exercise your crisis response plan (excluding fire drills and severe weather drills)?
  19. What grade level of students do you serve?
  20. How would you classify your school district?
  21. How many years of experience do you have in school counseling?
  22. What is your highest degree obtained?
  23. How long ago did you graduate with your highest degree?
  24. What is your gender?
  25. What is your race/ethnicity? Check all that apply.
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*Validity and Reliability.* Face and content validity was established by distributing the survey to five experts chosen based on their job responsibilities and experience including the supervisor of Guidance and Placement Services for the Missouri DESE, the coordinator and the assistant coordinator for Disaster Readiness for the Missouri Department of Mental Health, a certified school counselor, and the chair of the Research Methodology Department at a Midwestern university. In addition to face and content validity, an internal consistency reliability analyses on the three perceptual areas (questions 1-9) was conducted as part of a pilot study. A Cronbach's alpha for each of the areas was obtained, revealing two scales with excellent reliability and one with adequate reliability. The reliability coefficients for the three scales were individual perception scale .88, school-wide perception scale .81, and importance of preparedness scale .70. To examine the construct validity of the instrument, a principle axis factor analysis with a varimax rotation yielded the factor matrix given in Table 2 after removing one item from the scale.

**Table 2***Factor Analysis of the School Crisis Survey Scales*

Items	Factor		
	1	2	3
Prepared as a result of training	.869	.266	-.105
Prepared for crisis	.854	.198	.187
Implement crisis plan	.819	.317	-.038
ID at-risk students	.650	.251	.025
School staff prepared	.131	.919	-.039
School prepared	.426	.702	-.042
School plan developed	.378	.551	.031
Involved in plan	.431	.513	.051
Importance of training	.021	.123	.931
Importance of preparing	.016	-.095	.631

Extraction Method: Principal Axis Factoring.  
 Rotation Method: Varimax with Kaiser Normalization.  
 A Rotation converged in 5 iterations.

These factors, consistent with the three scales, were defined as individual crisis preparedness, school wide crisis preparedness, and importance of preparedness. The pilot study resulted in no changes for the independent variable questions (10-25).

### **Data Analysis**

The researcher used a one-way Analysis of Variance (ANOVA) or an independent samples t-test as appropriate to examine the differences of the three dependent variables or scales: (a) perceived individual preparedness, (b) perceived school preparedness, and (c) perceived importance of crisis intervention training in relation to the twelve independent variables: (1) presence of a school crisis response plan (yes, no, do not know), (2) presence of a crisis team (yes, no, do not know), (3) the counselor serving as a member of the school crisis team (yes, no), (4) frequency of crisis plan exercises (once a year, once a semester/quarter, once a month, less than

once a year, we have never exercised our plan), (5) school grade level (elementary, middle, high), (6) location (rural, urban, suburban), (7) years of experience (1-5 years, 6-10 years, 11-15 years, 16-20 years, 21+ years), (8) degree obtained (bachelors, masters, doctoral), (9) years since degree obtained (0-4 years, 5-9 years, 10-14 years, 15+ years), (10) gender (female, male), (11) race/ethnicity (African-American, Asian/Pacific Islander, Caucasian, Hispanic, Native American/ Alaskan Native, other). When significant differences were determined, *post hoc* tests were conducted to determine the groups that were significantly different. Univariate descriptive statistics were used to examine research question five.

## **Results**

### **Participants**

Respondents of the survey were 83% female, 95% Caucasian, and employed at the elementary school level (44%) or high school level (25%) in rural (49%) or suburban (43%) areas. The vast majority of the respondents held a Master's degree (97%) and one-third of the respondents received their highest degree less than four years ago. Most of the counselors (94%) worked in school districts with a crisis response plan and a crisis response team (82%). Over 72% of the responding counselors were members of the crisis team, and 28% come from schools that exercise their crisis plan once a semester. See Table 3 for demographic details.

### **Individual Crisis Preparedness Perception**

Individual crisis preparedness subscale questions included information about individual level preparedness, readiness to implement the school crisis plan, and the ability to assess students in crisis. Most of the respondents rated themselves as

“moderately prepared” (n = 60, 48%) to handle a major school crisis. Another 21% (n = 27) reported they were “extremely prepared” to handle a major school crisis. Over 45.6% (n = 57) of respondents reported feeling “moderately prepared” to implement the school crisis plan. The majority of counselors agreed (n = 71, 56.8%) that they are confident in assessing at-risk students for crisis, followed by counselors who strongly agreed (n = 29, 23.2%). The counselors reported feeling “adequately prepared” (n = 44, 35.2%), followed by “well prepared” (n = 41, 32.8%) as a result of crisis intervention training. Only two counselors (1.6%) reported no training experience. Each respondent’s answers were used to compute an individual perception of preparedness score on a scale of 1 (not at all individually prepared) to 5 (extremely individually prepared). The counselors’ scores ranged from 1.75 to 5.00 with a mean score of  $\bar{x}$  = 3.76 (SD = .709) between fairly and moderately prepared.

**Table 3**

*Demographic Information*

<b>Characteristic</b>	<b>Groupings</b>	<b>Frequency</b>	<b>Percentage</b>
Sex (n=124)	Female	103	83.1
	Male	21	16.8
Race/Ethnicity (n=123)	African-American	1	0.8
	Asian/Pacific Islander	0	0.0
	Caucasian	117	95.1
	Hispanic	2	1.6
	Native American/ Alaskan Native	1	0.8
	Other	2	1.6
Highest degree obtained (n=125)	Bachelors	1	0.8
	Masters	121	96.8
	Doctoral	1	0.8
	Other	2	1.6
Years since degree was obtained (n=124)	0-4 years	37	29.8
	5-9 years	35	28.2
	10-14 years	21	16.8
	15+ years	31	25.0

Characteristic	Groupings	Frequency	Percentage
Years of experience ( $n=125$ )	1-5years	40	32.0
	6-10 years	39	31.2
	11-15 years	16	12.8
	16-20 years	14	11.2
	21+ years	16	12.8
School location ( $n=123$ )	Rural	60	48.8
	Urban	10	8.1
	Suburban	53	43.1
Grade level ( $n=125$ )	Elementary	55	44.0
	Middle	25	20.0
	High	31	24.8
	A Combination	14	11.2
School crisis plan ( $n=124$ )	Yes	116	93.5
	No	3	2.4
	Do Not Know	5	4.0
School crisis team	Yes	102	81.6
	No	5	4.0
	Do Not Know	18	14.4
Crisis team member ( $n=124$ )	Yes	90	72.6
	No	34	27.4
Exercise crisis plan ( $n=123$ )	Once a year	32	26.0
	Once a semester	36	29.3
	Once a month	10	8.0
	Less than once a year	15	12.2
	Never	30	24.4

A one-way ANOVA found a significant difference in the individual preparedness scale when compared to the presence of a school crisis response plan ( $F(2,121) = 7.64$ ,  $p < .05$ ). A Scheffe's *post hoc* test revealed that counselors who hold higher individual preparedness perceptions were significantly more likely to report the presence of a school crisis plan ( $\bar{x} = 3.83$ ,  $SD = .66$ ) than those who did not know ( $\bar{x} = 2.75$ ,  $SD = .88$ ) if their school had a crisis plan. No significant difference was found for counselors who reported the presence of a school crisis plan and those who reported no plan existed.

Significant differences were found when the individual preparedness scale was compared to the presence of a school crisis response team ( $F(2,122) = 7.78$ ,  $p < .05$ ). Counselors who hold higher individual preparedness perceptions were significantly

more likely to report the presence of a school crisis team ( $\bar{x} = 3.87$ ,  $SD = .67$ ) than those who did not know ( $\bar{x} = 3.19$ ,  $SD = .71$ ) if their school had a crisis team.

An independent samples *t*-test comparing the means scores of counselors who reported being a member of a crisis response team to the individual preparedness scale found a significant difference between the two groups ( $t(122) = 2.33$ ,  $p < .05$ ). The mean perception of individual preparedness for the counselors who reported being members of the crisis team ( $\bar{x} = 3.85$ ,  $SD = .68$ ) is significantly higher than the mean of those who are not members of the team ( $\bar{x} = 3.52$ ,  $SD = .76$ ).

A one-way ANOVA revealed significant differences in the individual preparedness scale when compared to how often schools exercise their crisis response plan ( $F(4,118) = 4.29$ ,  $p < .05$ ). *Post hoc* tests reveal that counselors who hold higher individual preparedness perceptions were significantly more likely to report exercising the school crisis plan once a semester ( $\bar{x} = 4.04$ ,  $SD = .63$ ) than those who had never exercised the school plan ( $\bar{x} = 3.39$ ,  $SD = .76$ ).

Significant differences were found the responding counselor's years of experience was compared to the individual preparedness scale ( $F(4,120) = 4.33$ ,  $p < .05$ ). Counselors who hold higher individual preparedness perceptions were significantly more likely to have 21+ years of experience ( $\bar{x} = 4.21$ ,  $SD = .52$ ) than counselors who have 1 to 5 years of experience ( $\bar{x} = 3.44$ ,  $SD = .64$ ). No significant difference was found for counselors who had 6 to 10, 11 to 15 or 16 to 20 years of experience with those who have 21+ years.

A one-way ANOVA revealed significant differences ( $F(3,120) = 3.07$ ,  $p < .05$ ) in the individual preparedness scale when compared to the number of years the counselor



graduated with his or her highest degree (0-4 years, 5-9 years, 10-14 years, 15+ years). A Scheffe's *post hoc* test found that counselors who hold higher individual preparedness perceptions were significantly more likely to have obtained their highest degree 15+ years ago ( $\bar{x} = 3.96$ ,  $SD = .66$ ) than counselors who obtained their degree zero to four years ago ( $\bar{x} = 3.52$ ,  $SD = .64$ ). No significant difference was found for counselors who obtained their highest degree 5 to 9 or 10 to 14 years ago compared to those who obtained their highest degree 15+ years ago.

No significant differences were found in the individual preparedness scale and grade level in which counselors work ( $F(3,121) = .629$ ,  $p > .05$ ), the location of the school ( $F(2,120) = 2.46$ ,  $p > .05$ ), or the gender of the counselor ( $t(122) = -.07$ ,  $p > .05$ ).

### **School-wide Crisis Preparedness Perception**

Perceptual area 2 explored the counselors' perception of school-wide preparedness for a major school crisis. The school-wide perception scale included questions about the school crisis plan, the overall perception of school preparedness and colleague perception of school preparedness. The counselors reported that they have been minimally involved ( $n = 36$ , 28.8%) in the creation of the school crisis plan, while over 24% reported no involvement ( $n = 31$ ) in crisis planning. Yet, many counselors agreed ( $n = 44$ , 35.2%) or strongly agreed ( $n = 43$ , 34%) that their school plan was well developed and comprehensive. The counselors reported feeling their school was "moderately prepared" ( $n = 52$ , 41.6%), while 26% ( $n = 32$ ) felt their school was "fairly" prepared. Counselors also reported that their fellow school staff believe the school is "moderately" prepared ( $n = 43$ , 34.4%). Each respondent's answers were used to compute a perception of school-wide preparedness score on a scale of 1 (not at all

prepared) to 5 (extremely prepared). The counselors' scores ranged from 1.00 to 5.00 with a mean score of  $\bar{x} = 3.37$  (SD = .901) indicating that, overall, counselors felt their school was fairly prepared.

A one-way ANOVA found a significant difference in the school wide preparedness scale when compared to the presence of a school crisis response plan ( $F(2,118) = 13.41, p < .05$ ). The *post hoc* tests also revealed that counselors who hold higher school-wide preparedness perceptions were significantly more likely to report the presence of a school crisis plan ( $\bar{x} = 3.47, SD = .83$ ) than those who reported no plan ( $\bar{x} = 1.58, SD = .52$ ) or did not know ( $\bar{x} = 2.15, SD = .62$ ) if a plan existed.

Significant differences were found when the presence of a school crisis response team was compared to the school wide preparedness scale ( $F(2,119) = 10.97, p < .05$ ). *Post hoc* tests revealed that counselors who hold higher school-wide preparedness perceptions were significantly more likely to report the presence of a school crisis team ( $\bar{x} = 3.53, SD = .85$ ) than those who did not know ( $\bar{x} = 2.59, SD = .72$ ) if a team existed. No significant difference was found for counselors who reported the presence of a school crisis team and those who reported no team existed.

An independent samples *t*-test comparing the means scores of counselors who reported being a member of a crisis response team to the school wide preparedness scale found a significant difference between the two groups ( $t(119) = 3.47, p < .05$ ). The mean perception of school-wide preparedness for the counselors who reported being members of the crisis team ( $\bar{x} = 3.55, SD = .85$ ) is significantly higher than the mean of those who are not members of the team ( $\bar{x} = 2.94, SD = .90$ ).

A one-way ANOVA revealed significant differences in the school wide preparedness scale compared to how often schools exercise their crisis response plan ( $F(4,115) = 8.39, p < .05$ ). *Post hoc* test also revealed that counselors who hold higher school-wide preparedness perceptions were significantly more likely to report exercising the school crisis plan once a year ( $\bar{x} = 3.44, SD = .75$ ), once a semester ( $\bar{x} = 3.82, SD = .79$ ) or once a month ( $\bar{x} = 3.67, SD = .91$ ) than those who reported never exercising the school crisis plan ( $\bar{x} = 2.67, SD = .86$ ). No significant difference was found for counselors who reported exercising the school plan less than once a year and those who reported never exercising the plan.

Significant differences were found when the responding counselor's years of experience was compared to the school wide preparedness scale ( $F(4,117) = 2.73, p < .05$ ). A Scheffe's *post hoc* test revealed that counselors who hold higher school-wide preparedness perceptions were also significantly more likely to have 21+ years of experience ( $\bar{x} = 3.84, SD = .81$ ) than counselors who have 1 to 5 years of experience ( $\bar{x} = 3.07, SD = .76$ ). No significant difference was found for counselors who had 6 to 10, 11 to 15, or 16 to 20 years of experience compared to those who have 21+ years.

A one-way ANOVA compared the years the counselor graduated with his or her highest degree to the school wide preparedness scale. Significant differences were found ( $F(3,117) = 2.89, p < .05$ ). The Scheffe's *post hoc* test revealed that counselors who hold higher school-wide preparedness perceptions do not significantly differ between groups of years since the responding counselor graduated with her or his highest degree.

No significant differences were found in school wide preparedness scale and grade level in which the counselor worked ( $F(3,118) = .965, p > .05$ ), the location of the responding counselors ( $F(2,117) = 1.24, p > .05$ ), or the gender of the counselor ( $t(119) = 1.27, p > .05$ ).

### **Crisis Preparedness Importance**

Perceptual area 3 explored the counselor's perception of the importance of preparing for a major school crisis and included questions about the importance of preparing for crises. An overwhelming 86.4% ( $n = 108$ ) of counselors felt preparing for a major school crisis is very important. A majority 81.6% ( $n = 102$ ) also felt it was very important to attend crisis intervention training. Survey questions 9 and 10 were used to create perceptual area 3, importance of crisis preparedness. Each respondent's answers were used to compute a perception of importance score on a scale from 1 (not at all important) to 5 (extremely important). The counselors' scores ranged from 2.50 to 5.00 with a mean score of  $\bar{x} = 4.79$  ( $SD = .460$ ) indicating that responding school counselors feel that it is extremely important to prepare for a major school crisis. There was no significant difference in importance of crisis preparedness scale and any of the demographic variables.

### **Crisis Intervention Training Experiences**

Research question 5 explored the counselors' crisis training experiences with particular attention to the types of training attended, topics covered, and quality of the training. The respondents were asked about the types of crisis training they have attended. A majority of respondents ( $n = 85, 68\%$ ) reported that they have received training as an in-service or single session lasting less than one day, while approximately

half (n = 62, 49.6%) reported attending one day trainings. Many counselors (n = 58, 46.4%) reported that crisis intervention was covered in graduate courses, and 33.6% (n = 42) had attended a multiple day training. The most popular topic covered during crisis training was stages of grief (n = 99, 79.2%), followed by suicide prevention and intervention (n = 83, 66.4%), and communicating with parents (n = 81, 64.8%). The least covered topic was cultural competence in crisis response (n = 17, 13.6%). Participating counselors were asked to report the extent they felt prepared as a result of crisis intervention training on a six-point, Likert-type scale. The counselors reported feeling “adequately prepared” (n = 44, 35.2%), followed by “well prepared” (n = 41, 32.8%), “minimally prepared” (n = 22, 17.6%), and “very well prepared” (n = 16, 12.8%) as a result of crisis intervention training.

A total of 80 (64%) of 125 participants provided answers to an open-ended question about what the participating counselors found helpful when responding to crisis events at their school. Responses revealed 6 theme-related categories, simulation or drills, intensive training, crisis planning and materials, training on specific crisis topics, experience, and have never responded to a crisis. Over 22% (n = 18) of the respondents reported that simulations, crisis plans and materials, and training on specific crisis topics such as stages of grief and typical age reactions to crisis was helpful. One counselor stated, “The actual practice drill and the opportunity to discuss the issue during faculty meetings [was most helpful]. It is noted that no matter how prepared a person feels, until something actually happens, you really don't know.” Other counselors commented on previous training and crisis planning, “The training received did help our district to develop a school crisis plan - this has been extremely helpful in

times of crisis.” Another counselor stated, “The knowledge that a plan is in place and there are procedures to be followed - this lessens the concern about missing steps that are necessary (legally and or morally),” was most helpful when responding to a crisis. Still, others stated that only experience can be helpful, “Experience in my job has been the best factor. Some of the crisis drill/simulations were helpful as well.”

### **Discussion**

The purpose of the study was to explore Missouri school counselors’ perceptions of school crisis preparedness and related training experiences. The intent was to implement a web-based survey to analyze counselor perceptions and compare differences. Overall, the school counselors reported feeling moderately to extremely prepared for a major school crisis and perceived their schools as fairly prepared. Many respondents rated themselves as moderately to extremely prepared (69%) to handle a major school crisis. These findings contrast Allen, Burt, and colleagues (2002) national survey that reported 57% of the school counselors surveyed felt minimally prepared or not at all prepared to handle a major school crisis. The difference may be attributed to development of the Missouri Comprehensive Guidance Model and the implementation of responsive services (Gysbers & Henderson, 2000) or the 1996 Safe School Act. This combination may have increased school counselors’ awareness of their role as members of the frontline in crisis response and recovery and encouraged schools to become more prepared.

Bandura’s self-efficacy theory states that an individual’s expectation about their knowledge and skills as well as their capability to take the action required to overcome problems and succeed under the stresses and pressures of life are keys to success.

This is particularly important in crisis situations, as experts have suggested that when crisis occurs, individuals tend to go on “autopilot,” meaning responses and behaviors become automatic (US Department of Education, 2001). Over 94% of school counselors in the current study reported working in a district with a crisis plan and most (70%) reported feeling “moderately” to “extremely” prepared to implement the plan. Although no previous research has specifically examined the counselors’ feeling about implementing the response plan, a few have investigated crisis plan familiarity. Allen, Burt and colleagues (2002), report over 94% of counselors reported working in schools with a crisis plan and 75% rated themselves as familiar or very familiar with the plan. Adamson and Peacock (2012) reported over 95% of the schools surveyed had a crisis plan in place while only 84% has crisis teams. In a similar study, Allen, Jerome and colleagues reported that 91% of the school psychologists responding to their survey worked in schools with a crisis plan and were very familiar with the plan (2002). Counselors in this study who reported the presence of a crisis plan, a crisis team (were members of the crisis team) were significantly more likely to report a higher perception of individual preparedness than those who did not know if their school had a crisis plan or team and were not members of the team. In addition, school counselors who reported exercising the crisis plan at least once a semester were significantly more likely to report a high perception of individual preparedness than those who reported never exercising the plan.

Although Missouri school counselors reported lower perceptions of school-wide preparedness than individual preparedness, the majority (67%) felt their school was “fairly” to “moderately” prepared for a major school crisis. An overwhelming number

(87%) reported that their fellow school staff believed the school was moderately to less than prepared for a major school crisis. As with the individual preparedness scale, counselors who reported the presence of a crisis plan and crisis team were significantly more likely to feel like their school was prepared than those who did not know if they had a crisis plan or a crisis team. Members of the crisis team were also significantly more likely to feel like their school was prepared for a major school crisis. Unlike the individual preparedness scale, counselors who reported exercising their school crisis plan once a year, once a semester, or once a month were significantly more likely to feel the school was prepared than those who had never exercised the plan.

It is not surprising that the counselors who reported the presence of a crisis plan, crisis team and are members of the crisis team would feel individually more prepared and that their school was more prepared than those who do not know if a plan or team exist and are not members of the team. School crisis plans typically include guidelines and procedures for adequately responding to a variety of potential all-hazard events (Adamson & Peacock, 2012; Heath & Sheen, 2005; Roberts, 2000, Sprague & Walker, 2005; US Department of Education, 2001). Involvement in the crisis planning process as well as with crisis teams has been found to influence a counselor's perception of their ability to implement the crisis plan (Knox & Roberts, 2005). Involvement in the crisis planning process would theoretically increase self-efficacy and therefore, increase the perception of individual preparedness. As suggested in Bandura's (1977), self-efficacy theory, experience and training can increase confidence in one's ability to perform the desired behavior or skills. It could be suggested that the counselors who reported feeling their school is prepared, but felt their counterparts did not perceive the



same level of school-wide preparedness, are more involved with the crisis team or in the crisis planning process or simply have been working long enough to have previously experienced crisis situations. It is not the goal of the current study to explore causality; therefore further research and analysis is needed to explore the casual links between training and school counselor perception of preparedness.

Experience can positively affect an individual's self-efficacy. Counselors with 21+ years of experience and those who received their highest degree 15+ years ago were significantly more likely to report high individual preparedness perception than those who have 1-5 years of experience and received their highest degree less than 4 years ago. In addition, these counselors were significantly more likely to feel like the school was prepared. Counselors with more experience are more likely to have been exposed to school crises and crisis training opportunities due to time in the profession. As stated in the literature, continued education and participation in crisis trainings and planning are characteristics identified in making counselors feel prepared for effectively employing crisis intervention (Allen, Burt, et al., 2002; Allen, Jerome et al., 2002; Chibbaro & Jackson, 2006; Fairchild, 1997 & Health & Sheen, 2005).

One of the key constructs of self-efficacy theory is outcome values, or the worth a person places on the outcome of a behavior. The counselors in this study overwhelmingly (over 80%) felt that both preparing for crisis and attending crisis intervention training was valuable rating it as "very" important. Over 85% of the current respondents reported feeling "adequately" or "well" prepared as a result of training. However, a gap exists in the percentage of counselors who feel moderately to extremely prepared for crisis (70%) and those who contributed their readiness to

training. Only 12% stated that they were “very well” prepared for crisis due to training. This disconnect could be a sign of the types of or topics covered in training and is an area for expanding future research. With the rise in visibility of major school crises and the increased political and public interest in crisis prevention it is no wonder counselors rated crisis intervention as very important. Although little research has been completed on the strategies outlined in the various school preparedness publications and trainings, Nickerson and Zhe (2004) found consistency across recommendations. The publications consistently recommended developing a comprehensive crisis plan, forming a multidisciplinary crisis response team, and using crisis drills to practice response techniques all of which would presumably build self-efficacy.

### **Limitations**

Limitations of the study should be considered when interpreting the results and planning for future research. The results of this research are not generalizable to all school counselors, nationally, due to the limited sampling frame of Missouri school counselors. In addition, the present study utilized a web-based survey for data collection which lends itself to participants who are more comfortable with electronic communication methods. On average, general internet surveys yield response rates of 25% (Dillman, 2000). The response rate for the current study was 21%. This could be due to accessibility issues such as some school districts have restricted access to the internet. Schools with restricted access may block unapproved, private websites such as the one where the current survey was posted. Suggestions for solving this problem were included in the follow-up second and third recruitment email messages and involved sending the survey link to a home address and accessing it from a non-school

district computer or asking the technology administrator in the school to temporally allow access to the website. Each of these suggestions required great effort on the part of the participant, which can lead to a limited response rate.

### **Implications**

The implications of the current study can be summarized in two points. First, crisis intervention preparation is seen as important by Missouri school counselors. Understanding that counselors view crisis preparation as important, school leaders should capitalize on counselors' understanding involving them in the creation of policies and procedures for crisis response and in the education of other school professionals and parents about crisis policies. There is no doubt that school counselors play an important role in response and recovery as they are often the first professional students and families come into contact with after a crisis (Chibbaro & Jackson, 2006). School leaders can further utilize this contact to help project a positive image of care and understanding during crisis events. It is during this critical time that school counselors can shine in their ability to provide crisis intervention services.

Second, the current study supports previous research and suggests that if counselors are members of the crisis team and are more active in crisis planning, they may have higher crisis intervention self-efficacy. The study suggests that counselors have a duty to understand the school crisis plan as well as participate in on-going training to increase knowledge and confidence, which may increase crisis intervention self-efficacy. The school crisis team is usually determined by school administrators and consists of a variety of school professionals including school counselors, social workers, principals, and teachers (Health & Sheen, 2006; Sprague & Walker, 2005). Missouri has

approached this idea with the publication of the *Model School Crisis Response Plan Workbook*. However, there is no current requirement forcing schools to create and maintain a crisis plan or policy regarding major school crisis procedures, such as evacuation. There are also no requirements about what personnel should be active members of the crisis team. The current study highlights the importance of school counselors being involved, and therefore suggests that schools who involve their counselors in all aspects of crisis preparedness will develop counselors with higher crisis intervention self-efficacy. Finally, the current research is a beginning. Now that perceptions have been identified, future research should be conducted to identify gaps and further investigate crisis training needs of all school staff responding to a major school crisis.

### **Future Research**

School crisis events cause both physical and psychological distress in students and staff. Crisis can cause academic decline and trigger various emotional and behavioral responses (Chibbaro & Jackson, 2006; Heath & Sheen, 2005; Strøm, Thoresen, Wentzel-Larsen, & Dyb, 2013). However, when school personnel such as school counselors, administrators, social workers, teachers, and other staff are prepared to deal with crisis, children can continue to grow emotionally, intellectually, and physically (Felix et al., 2010; Heath & Sheen, 2005). Future research must expand the scope of the current study to include a national sample of school counselors and explore the role of all school personnel. This expansion would allow researchers to explore the preparedness levels across disciplines and further identify components of successful crisis preparedness in school settings across the country.

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