

Examining the Needs of Suicide Prevention and Intervention in Elementary Schools:  
An Exploratory Study with Elementary School Counselors

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**Abstract (Academic)**

While research studies have investigated suicide prevention and intervention in secondary schools, there is very limited research that explores this support specifically at the elementary school level. This paper reviews the prevalence and associated risk factors of youth and adolescent suicide in the United States and best practices of school counselors providing suicide prevention and intervention in schools. The theory of adolescent suicide and social cognitive theory's self-efficacy will frame the discussion of the literature to provide a holistic picture of the elementary schools' needs of implementing suicide prevention and intervention. This research study is designed to fill a gap in the reviewed literature that shows the need for providing prevention and intervention in elementary school and the education that is currently being provided, as well as the level of self-efficacy among elementary school counselors providing suicide intervention to students at-risk. The following research questions guide the study:

1. What percentage of elementary education school counselors in the surveyed districts report having implemented suicide education as prevention in their elementary school with 4<sup>th</sup> and 5<sup>th</sup> graders, and what do these programs entail?
2. What are the perceptions of school counselors regarding the necessity of suicide education programs in elementary school?
3. What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King Instrument?

4. To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide education in the elementary school?

Responses from 98 elementary school counselors employed within three school districts in the mid-Atlantic region were surveyed to examine the current suicide prevention programs in place and explore counselor self-efficacy related to providing suicide intervention for at-risk students. The King Instrument (King, 1999) was adapted for elementary school counselors and used to answer the research questions. A total of 7 of participants reported providing suicide prevention to the upper elementary grades. A much larger number of this sample, 83 (84.7%), perceived that it is the role of the school counselor to identify students at risk of suicide. Participants reported high overall self-efficacy for providing suicide interventions. Only one variable, graduate school training ( $B=0.249$ ,  $p<.01$ ), was found to significantly predict self-efficacy. A review of the current study will discuss implications for school counselors and counselor educators, and provide suggestions for future research.

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**Abstract (General Audience)**

While research studies have investigated suicide prevention and intervention in secondary schools, there is very limited research that explores this support specifically at the elementary school level. This paper reviews the prevalence and associated risk factors of youth and adolescent suicide in the United States and best practices of school counselors providing suicide prevention and intervention in schools. The theory of adolescent suicide and social cognitive theory's self-efficacy will frame the discussion of the literature to provide a holistic picture of the elementary schools' needs of implementing suicide prevention and intervention. This research study is designed to fill a gap in the reviewed literature that shows the need for providing prevention and intervention in elementary school and the education that is currently being provided, as well as the level of self-efficacy among elementary school counselors providing suicide intervention to students at-risk. A review of the current study will discuss implications for school counselors and counselor educators, and provide suggestions for future research.

## Dedication

This document is dedicated to all of my family, friends, and colleagues who have supported me during this challenging, yet personally rewarding journey. I am eternally grateful for all of your kindness, love, and understanding. To my mom, knowing you always had my back for whatever I needed means the world to me. To my dad, the most encouraging and courageous man I know. To my sister, Dawn, your constant belief in my ability to attain this goal is the motivation I needed. To my dear friend, Caitlin, thank you for always being there for me. Your supportive words of wisdom and love are forever embedded in my heart. To my friend, Sheryl, thank you for your endless motivation and support to me and my girls all these years. To my counseling colleagues, thank you for your constant encouragement and inspiration. To Josh, thank you for your unwavering support and being the greatest father to our girls. And lastly, I want to thank my beautiful daughters, Kara and Taylor, who always make me feel like I am a superhero and can accomplish anything. The two of you are my little miracles and you are the most important part of my life. You inspired me to keep working on my goal and I hope that my determination and perseverance will give you the inspiration you need to achieve all of your dreams. You instill my innermost happiness and I could not have completed this life endeavor without your unconditional love.

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## **Chapter I**

### **Introduction**

Suicide is a rising concern among adolescents today. In the Center for Disease Control's (2016) report, an overview of the suicide rate in the United States showed an increase of 24% from 1999 through 2014. The increase was shown in both males and females between the ages of 10 and 74, with suicide among adolescents and young adults increasing and among the leading cause of death for these groups. Suicide is the second leading cause of death for persons between the ages of 10 and 24 (CDC, 2016). The National Center for Health Statistics (NCHS) reported 196 suicides of males between the ages of 10 and 14, and 64 female suicides between the ages of 10 and 14 in 2002 (Riesch et al., 2008). In 2015, this number nearly doubled and the total suicides of 10 to 14 year olds was 409 (CDC, 2016). It has been reported nationwide that 18% of students as young as grade six had suicidal thoughts (Riesch et al. 2008). (see Table 1)

Table 1.1

*Introduction to Adolescent Suicide*

<i>Year</i>	<i>Source</i>	<i>Statistics</i>	<i>Age Range</i>	<i>Notes</i>
2002	National Center for Health Statistics (NCHS)	196 suicides of males 64 females	Ages 10-14	
2003-2004	Riesch, Jacobson, Sawdey, Anderson, & Hendriques	8% increase in suicide	Ages 10 and 24	18% of students as young as grade six had suicidal thoughts
2008	Center for Disease Control and Prevention (CDC)		Ages 12-17	24% considered suicide 10% attempted suicide
2015	Center for Disease Control and Prevention (CDC)	409 suicides of males and females	Ages 10-14	54% spike in suicides of 11-12 year olds in the last three years
1999-2015	Center for Disease Control and Prevention (CDC)	1,309 suicides of children	Ages 5-12	

Many research studies show factors that increase adolescent suicide (Buchman-Schmidt, Chiurliza, Chu, Michaels, & Joiner, 2014; Moon, Karlson, & Kim, 2015; Sheftall, et al., 2016), and given the amount of time that school personnel interact with adolescents daily, the American Federation for Suicide Prevention (AFSP) impels that every state require schools to implement a comprehensive suicide prevention, intervention, and postvention policy. As of 2016, a total of ten states mandate annual suicide prevention training for school personnel (AFSP, 2016). Effective July 1, 2017, legislation SB 1117 in the state of Virginia, requires school counselors for initial licensure and renewal licensure to complete training in the recognition of mental health

disorder and behavioral distress, including depression, trauma, violence, youth suicide, and substance abuse (Virginia Legislative System, 2017). This new state legislation shows the importance that school counselors play in supporting students at risk and providing suicide prevention and intervention.

More attention and focus has been given to school-based suicide prevention efforts since the publication of the Surgeon General's Call to Action to Prevent Suicide in 1999, and the National Strategy for Suicide Prevention: Goals and Objectives for Action release in 2001 (Liebling-Boccio & Jennings, 2013). Numerous initiatives have been implemented in school settings since the Council for Accreditation of Counseling and Related Education Programs (CACREP) initially outlined the role school counselors have in suicide risk assessment in 2009 (Fineran, 2012).

With growing national attention to youth suicide, there is greater recognition that school-based mental health professionals have a larger role to play in suicide prevention, and school counselors are key players in helping identify students at-risk (Liebling-Boccio and Jennings, 2013). School counselors have an ethical and legal responsibility to immediately address any student who is knowingly at-risk of self-harm and/or suicidality. Furthermore, school counselors are typically the first person a faculty, staff-member, administrator, or peer will go to with information of a student at-risk. Many studies have focused on the importance of school counselors regarding suicide prevention (Carlson & Kees, 2013; Gibbons & Studer, 2008).

Although there is no proven method of preventing an adolescent from completing suicide, providing prevention through educational awareness regarding mental health and suicide risk factors at an early age can help demystify suicide. Mental health can affect a student's school performance, and with teachers, mental health providers, and other school personnel

interacting with students regularly, schools are a key setting to help keep students feeling safe (Suicide Prevention Resource Center (SPRC, 2017). An education environment that is welcoming and supportive can help encourage adolescents to communicate their personal difficulty, or peers can share their knowledge of other peers showing at-risk factors.

Given the lack of research regarding suicide prevention at the elementary school level, it is critical to examine the factors that are attributing to this lack of information, whether school counselors are trained to provide such student support, and whether they feel confident in providing this sensitive information to children in schools.

### **Statement of the Problem**

To date, several studies have been conducted regarding the importance of providing suicide education as prevention and intervention in the middle and secondary schools (Robinson, et al., 2013; Fineran, 2012). Paulus, Ohmann & Popow (2016), in their comprehensive review of prevention and treatment from the last two decades concluded that mental health school-based interventions (SBI) are effective. However, there is very little research on elementary education students receiving suicide education and intervention support. This study will contribute to the literature by exploring the suicide education programs or curriculum currently being provided in several urban and suburban school districts in the mid-Atlantic region. Furthermore, identifying the potential factors that are prohibiting prevention programs or intervention to be provided in elementary schools can be used in the training of future school counselors in counselor educator programs.

Adolescent suicide is a reality that continues to exist. It is difficult to comprehend that children under the age of 13 die by suicide, and the national statistics show this does in fact occur. Given the importance of education and early prevention, it makes sense to implement this

at an early age. It is important to explore the specific needs of suicide education as an avenue to prevention and intervention in elementary schools. With the alarming statistics of adolescent suicide rates, and the assumption these adolescents are in fact a member of a school community, this poses several questions for future research.

### **Purpose of the Study**

The purpose of this study is to expand on prior knowledge related to adolescent suicide and explore current practices and perceptions of school counselors about the need for such practice at the elementary school level. School-based suicide education includes attention to three primary considerations: prevention and preparation, intervention with at-risk students, and postvention (American Counseling Association, 2016). Additionally, the American School Counselor Association's (2015) position statement on Student Mental Health includes the following:

“Students’ unmet mental health needs pose barriers to learning and development. Because of school counselors’ training and position, they are uniquely qualified to provide education, prevention, intervention and referral services to students and their families. Although school counselors do not provide long-term mental health therapy in schools, they provide a comprehensive school counseling program designed to meet the developmental needs of all students. As a component of this program, school counselors collaborate with other educational professionals and community service providers.”

In recognizing that suicide education encompasses all three components: prevention, intervention, and postvention, there has been little research on this education being provided within an elementary school population. The current study aimed to bridge this gap by providing an exploratory assessment of current practice in elementary schools, with particular attention to prevention and intervention. The researcher examined school counselors’ perceptions of existing



suicide education programs, the necessity of implementing such programs, and their confidence level and training background in providing prevention and intervention to elementary education students.

### **Research Questions**

1. What percentage of elementary education school counselors in the surveyed districts report having implemented suicide education as prevention in their elementary school with 4<sup>th</sup> and 5<sup>th</sup> graders, and what do these programs entail?
2. What are the perceptions of school counselors regarding the necessity of suicide education programs in elementary school?
3. What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King Instrument?
4. To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide education in the elementary school?

### **Definition of Terms**

Adolescence. People between the ages of 10 and 19 years of age (World Health Organization).

Professional School Counselor. The professional school counselor is a certified/licensed professional with a master's degree or higher in school counseling or the substantial equivalent and is qualified to address developmental needs of all students. Professional school counselors deliver a comprehensive school counseling program that encourages all

students' academic, personal/social and career development needs to help students maximize student achievement (American School Counselors Association, 2016).

School-based Suicide Intervention. Includes attention to three primary considerations: prevention and preparation, intervention with at-risk students, and postvention (American Counseling Association, 2016).

Self-efficacy. Is "the degree to which an individual feels confident in performing a particular task" (Bandura, 1986, p. 391).

Suicidal Behavior. Suicidal or self-destructive behavior is any self-chosen behavior that seriously will damage one's self or will lead to one's death if not interrupted. (Fish, 2000, p. 21)

Suicidality. The likelihood of an individual completing suicide (Medical Dictionary).

Suicide Education.

- 1) (as prevention) developmentally appropriate informational and training programs for students, families, and school staff, that includes identification and are designed to protect students;
- 2) (as intervention) provide support and resources for all stake-holders in the case of a student exhibiting suicidal thoughts or behaviors; and
- 3) (as postvention) provide support and resources for stakeholders in the case of a suicide attempt or death. (ASCA, 2015)

Title I. "Title I, Part A (Title I) of the Elementary and Secondary Education Act, as amended (ESEA) provides financial assistance to local educational agencies (LEAs) and schools with high numbers or high percentages of children from low-income families to help ensure that all children meet challenging state academic standards. Federal funds are

currently allocated through four statutory formulas that are based primarily on census poverty estimates and the cost of education in each state” (US Department of Education, 2015).

### **Delimitations and Limitations**

Delimitations in this study include generalizability to school counselors at the elementary school level only. The limitations of the study are a small sample size and sample population limited specifically to the northern Virginia region. The demographics of school counselors were not known until after the data was obtained.

### **Summary**

Many factors contribute to the stressors that adolescents face today, and these prolonged factors can contribute to suicidality. The research has shown rising suicide rates among adolescents and also demonstrate effectiveness of suicide education programs as prevention and intervention at the middle school and high school level. Since the age of adolescence begins at 10, it is imperative to explore these implications at the elementary school level. However, if school counselors are not confident in conducting suicide prevention programs or providing intervention with this age group, the support may not be effective.

## **Chapter II**

### **Review of the Literature**

As the number of adolescents who attempt suicide has doubled over the last decade (Plemmons, Hall, & Browning, 2017), the need for school professionals to be trained and knowledgeable in suicide prevention, intervention, and postvention also increases. The likelihood of a professional school counselor encountering a student contemplating suicide is high, and more than likely he/she will know of a student who dies by suicide at least once throughout his/her career (Wolfe, Mertler, & Hoffman, 1998). Review of the recent literature shows that middle and high schools have suicide prevention and intervention programs in place, however, there is a lack of research regarding postvention in middle and high schools. There is also, however, a lack of research of having any suicide programs at the elementary school level and the purpose of this study is to explore prevention and intervention in the elementary schools.

### **Adolescent Suicide**

The age of adolescence, as classified by the World Health Organization, is between the age of 10 and 19 years; a stage between childhood and adulthood. These are important developmental years for the whole child, beginning at the elementary school level, regarding their social, personal, and academic growth.

According to the World Health Organization, suicide is among the leading causes of death worldwide among 10 to 19 year olds. Studies suggest that 90% of teenagers who complete suicide have a diagnosable and/or treatable mental disorder, and more than 50% of these teens had major depression (King, Strunk, & Sorter, 2011). In 2015, CDC reported that 8.0% of students in grades nine through 12 in the United States attempted suicide one or more times in the previous 12 months (10.6% of females and 5.4% of males). In a more recent study,

Plemmons et al. (2017) found that the number of children and teens hospitalized for suicidality doubled over the last 10 years. This study reported that between the years of 2008-2015, a total of 118,363 children were hospitalized from as young as five years old. In 2008, 60% of hospitalized adolescents were females and by 2015, this number increased to 66%; From 1999-2014, reported suicides of females between the ages of 10 and 14 tripled (CDC, 2016).

Given the time that youth spend in school, this would indicate the importance that education professionals are knowledgeable of risk factors in suicide. Specifically, school support professionals, such as school counselors need to be prepared to provide intervention for youth at-risk and take a leadership role in the event of a suicide. Sources and reported numbers of adolescent suicide are summarized in Table 2.1.

Table 2.1

*Prevalence of Adolescent Suicide*

	Age	Suicide Ideation (SI)	Suicide Attempts (SA)	Suicide Plan	Died by Suicide	Population	Notes	Source
2008	12-17	15%	7%	11%		National survey		CDC
2008	9-12 12-17	24%	31% 7-10%	72%		179 participants from an urban, mid-sized public school district	higher ideation reported by African American students (no mention of school counselor role in suicide intervention).	Riesch et al. (2008), Robinson et al. (2013)
2012	10-19				51	Virginia		Virginia's Online Injury Report Services (VOIRS)
2014	10-19				66	Virginia		VOIRS
2008-2015	5-17		118,363			National	37% were between 12-14 and 13% were between 5-11	Plemmons et al. (2017)

Fish (2000) describes the four categories of suicidal behavior: suicidal ideations, suicidal threats, suicidal attempts, and completed suicide; all of which are hierarchal. Suicidal ideations

generally come first, followed by threats or acts, and most completed suicides are followed by previous attempts. Viewing suicidal behaviors as a continuum can be helpful to predict and prevent self-destructive behavior, and “ignorance of the warning signs will leave these children at risk and will create a situation in which ignorance kills” (Fish, 2000, p. 21).

Suicide-related behaviors such as suicide, suicide attempts (SA), self-injury, and suicidal ideation (SI) are common among school-aged adolescents (Robinson et al., 2012). According to Robinson et al.’s study, some alarming statistics include 24% of 12 to 17 year olds having reported SI, and 7-10% report SAs. Fineran (2012) notes that some youth suicides are not classified as suicidal, and are noted as accidental deaths or causes unknown, and indicates the possibility of youth suicide statistics being even higher. Moreover, the Center of Disease Control and Prevention (CDC) stated that suicide is the third leading cause of death for youth, and adolescents surveyed nationally reported that 15% had considered suicide, 11% admitted to planning suicide, and 7% attempted suicide (Fineran, 2012). If considering suicide and planning suicide are the same as SI, the findings in these studies are consistent and alarmingly comparable. Given these disquieting numbers, many questions arise as to what school professionals can do to provide support and assistance to youth at-risk. Survey of literature does indicate that at-risk students can be identified early with the use of depression screenings in schools, and some districts are mandating these screenings (Erickson & Abel, 2013; Horowitz, Ballard, & Pao, 2009).

According to Virginia’s Online Injury Report Service (VOIRS), youth suicide rates have continued to increase throughout the state. In 2012, there were a total of 51 suicides (within the ages of 10 through 19), and in 2014, this number increased to 66 (see Table 2). The ages of youth identified in suicidal behavior begin at age ten, therefore educational awareness regarding

suicide should be implemented as early as elementary school. School-based education provides the exposure of knowledge that youth may not otherwise learn at home. Educators promote self-awareness and encourage youth to communicate with a trusted adult when there is a problem. Teaching children the importance of developing a strong emotional self and eliminating the stigma of accepting professional help when needed is part of the role of a school counselor.

### **Adolescent Suicide: Risk Factors**

According to the National Alliance on Mental Illness (NAMI, 2016), more than 90 percent of people who die by suicide have depression or other mental health disorders, or substance-abuse disorders (often in combination with other mental disorders). Many exhibiting factors contribute to people who are at high risk of suicide with a combination of individual, relationship, community and society factors (Center for Disease Control, 2016). However, the research within this paper focuses exclusively on the suicidal factors shown among adolescents.

“The risk for suicide frequently occurs in combination with external circumstances that seem to overwhelm at-risk teens who are unable to cope with the challenges of adolescence because of predisposing vulnerabilities such as mental disorders” (APA, para 2). Other examples of stressors for this age group are disciplinary problems, interpersonal losses, family violence, sexual orientation confusion, physical and sexual abuse, and being the victim of bullying (APA, 2017).

A study conducted by Riesch et al. (2008) that will be discussed further in this chapter, examined suicide risk factors with youth ages nine through 12 who admitted to suicidal ideation (N=179). These risk factors include intrapersonal (ways of coping: externalizing and internalizing), interpersonal (family communication), family functioning and caring, physical characteristics (puberty), peer networks, and other health risks (access to a weapon and/or



alcohol). However, “there is little data to assist understanding of the greater need that considers suicide and its many antecedents, such as depression, anxiety and prior attempted suicide” (Riesch et al., 2008, p. 271).

**Mental health related issues.** Although psychiatric disorders are common among youth who attempt suicide, 40% of those under the age of 16 who died by suicide did not appear to have a diagnosable psychiatric disorder (Fineran, 2012). However, risk factors for suicidality in adolescents were identified to include depression (Horton et al., 2016; King, Strunk, & Sorter, 2011; and Kuo et al., 2013). Erickson and Abel (2013) summarize important findings that link social-emotional health and academic success, which demonstrates the importance of school professionals supporting student mental health.

**Prior attempts.** Individuals who have attempted suicide are at an elevated risk for suicide in the future, and are linked to low self-esteem, externalizing attitudes, interpersonal difficulties, and emotional dysregulation (Robinson et al., 2012). These same effects can also expand among family members and friends or peers of a person who dies of suicide (Robinson, et al., 2012). Fineran (2012) discusses the many risk factors for youth suicide attempts and completions as being previous attempts, intent, ideation, and precipitating events, as well as psychiatric disorders.

**Sense of belonging.** Horton et al.’s (2016) study, more specifically discussed later in this paper, examined suicidality in adolescents within the Interpersonal Theory of Suicide (IPTs) framework. This research identified the significance of sense of belonging among adolescents and less significance with perceived burdensomeness. This outcome is not surprising given the high level of importance that adolescents place among their peer networks. This would also tie in with research related to bullying and adolescent suicide. Rigby and Slee (1999) identified a

significant relationship with bully-victims and suicidal ideation within their research study.

Adolescents in secondary school in Australia (N=1103 and N=845) were investigated through self-reports and peer nomination, and the results of this study indicated that students involved with bully-victim problems, especially those reporting little social support, were significantly related to suicidal ideation.

Moon et al.'s (2015) study on peer victimization and adolescent suicide also supports Horton et al.'s (2016) study about the importance of belonging. This study explored three specific risk factors (sexual behaviors, aggression, and substance abuse) as they relate to peer victimization-suicide relationship. These researchers referred to peer victimization as, "the experience among children of being a target of the aggressive behavior of other children, who are not siblings and not necessarily age-mates" (p. 441). The findings from this study showed that peer victimization does have a significant effect on suicidal behavior, aggression and substance abuse (not risky sexual behavior) were found to mediate the risk of suicide.

Given the most identifiable risk factors specific to adolescents in recent literature, this paper reviewed suicide risk factors as mental health related issues, interpersonal/relationship difficulties and loss, sense of belonging/bullying and peer issues, prior attempts, family violence, history of abuse, sexual orientation and other puberty issues, and other intrapersonal issues (see Table 2.2). Given the considerable amount of suicide factors among adolescents, understanding suicidality among this population further can be explored through theoretical frameworks that describe what drives an adolescent's intent to die by suicide. The sources and reports of adolescent suicide risk factors are summarized in Table 2.2.

Table 2.2

*Adolescent Suicide Risk Factors*

<b>Mental Health Issues</b>	<b>Prior Attempts</b>	<b>Sense of Belonging</b>	<b>Notes</b>	<b>Source</b>
<p>90% of teens who died by suicide have a diagnosable and/or treatable mental disorder; more than 50% of these teens had major depression As many as 65% of adolescents report feeling depressive symptoms</p>			<p>Middle school quant study in Seattle, Washington screened students with Mood and Feelings questionnaire</p>	<p>WHO Kuo et al., 2013</p>
			<p>linked social-emotional health with academic success</p>	<p>Erickson and Abel, 2013</p>
<p>impulsivity, depression, hopelessness</p>		<p>Showed high level of importance that adolescents place among their peer networks Significance with bully-victims and suicide ideation</p>	<p>IPTS framework Secondary school</p>	<p>Horton et al., 2016 Rigby and Slee, 1999</p>
<p>40% of youth under 16 who attempted suicide did not have a diagnosable psychiatric disorder</p>				<p>Fineran, 2012</p>
	<p>links to low self-esteem, externalizing attitudes, interpersonal difficulties, and emotional dysregulation</p>			<p>Robinson et al., 2012</p>

**Interpersonal-Psychological Theory of Suicide (IPTS)**

The Interpersonal-Psychological Theory of Suicide (IPTS) was developed by Joiner in 2005. He believed that people died by suicide when they possessed both the desire to die and the ability to do so. Joiner explored his belief and examined how this desire and ability develop. His theory identifies three specific domains including: perceived burdensomeness, thwarted belonging/social alienation, and acquired ability to enact self-injury. Perceived burdensomeness and thwarted belonging represent a person's desire to suicide, and a person's acquired ability demonstrates his/her risk level of suicide completion or serious attempt of suicide.

**Dynamic interpersonal states.** Joiner (2005) sought to investigate the factors that drive a person's suicidality. He theorized the first two specific domains of his theory as dynamic interpersonal states: perceived burdensomeness and low belonging. Perceived burdensomeness is how an individual perceives him/herself in relation to their friends and loved ones. He/she may see him/herself as a burden on the people central to their life and believe they are better off without them alive. In IPTS, thwarted belonging refers to an individual contemplating suicide who does not feel accepted or a sense of belonging. Either of these emotional states would enable a person to passively be suicidal, however, a person with both of these states interacting simultaneously would enable an active stage of suicidality (Horton et al., 2016).

**Acquired capability.** According to the third component of IPTS, an individual contemplating suicide would have "acquired capability." This measure would involve individuals who have developed a fearlessness of death, and also as having a high threshold for pain. Horton et al.'s (2016) study aimed to find if adolescents with a history of suicidal intent have a higher level of acquired capability. This level was measured using the Fearlessness About Death Scale in an adolescent clinical sample.

Acquired capability is seen as a continuous construct that develops over time with an individual having repeated exposure to painful and fearsome experiences. Joiner explains the basis for this proposition from Solomon's opponent-process theory, "which suggests that with repeated exposure to an affective stimulus, the reaction to that stimulus shifts over time such that the stimulus loses its ability to elicit the original response and, instead, the opposite response is strengthened" (Joiner, 2009, para. 9).

Joiner's IPTS has much validated evidence that supports adults, and Horton et al. (2016) sought to examine this theory's constructs among adolescents in a quantitative study. Results from this study showed evidence to support IPTS among a clinical sample of 147 adolescents in an inpatient psychiatric unit. This study is useful in determining the risk of suicide attempts. IPTS offers a framework that merits an understanding of the factors that explain the different levels of suicidality.

This study aimed to answer questions related to suicidal ideation, suicidal intent, and questions involving the full IPTS model. All 147 participants were within the age of 12-17 with 43% of these patients attempting suicide prior to admittance into an inpatient psychiatric unit. Patients presenting with an intellectual disability, active psychosis, neurological disorder, or substance abuse were not considered eligible for the study. (Horton et al., 2016)

The measurement tools used within this study were the Interpersonal Needs Questionnaire (INQ) and the Acquired capability for Suicide Scale-Fearlessness about Death (ACSS-FAD). The INQ contains 15 items to represent perceived burdensomeness and thwarted belongingness; and the ACSS-FAD includes seven statements, and all questions were answered on a Likert scale. An additional measure, the Quick Inventory of Depressive Symptomatology-Adolescent Version Self-Report (QIDS-A-SR-17) was used to measure suicidal symptoms and

depression severity and included 17 items to be self-reported. Hopelessness was measured using the Hopelessness Scale for Children (HSC), a 17 item self-report scale for participants to answer with true or false about their expectations for the future. (Horton et al., 2016)

Horton et al. (2016) used Joiner's IPTS framework in research as it applies specifically to suicide in adolescents. Findings did demonstrate an effect of low belongingness, perceived burdensomeness, and acquired capability for suicide in relation to suicidal symptoms. This study is one of very few to examine all constructs of IPTS concurrently in a high risk sample, and the results do support the IPTS and the importance for early risk detection and need for early implementation of prevention and intervention strategies. A strength of this theory is that "it offers a testable hypothesis with regard to the progression from ideation to action in proposing that acquired capability for suicide is essential before ideation is converted to intent" (p. 1140).

### **Suicide Ideation and Elementary-Age Youth**

Riesch et al.'s (2008) research study is important in the field of education because, "While some may find the statistics [rarity of youth suicide] reporting child and adolescent suicide encouraging, the data do not reflect the tremendous impact of the illness [depression, anxiety and prior attempted suicide] that has occurred prior to the death attributed to suicide" (p. 271). These authors discuss the myths surrounding youth suicide, such as the belief that children do not have the capacity to think or act upon suicide based on their developmental level, or that childhood is a time that is free of stress or problems; however, researchers have found that children as early as eight and nine do have a thorough understanding of suicide.

Riesch et al. (2008) used the Social Disintegration Model (SDM) to identify influencing factors and characteristics of young adolescents expressing suicide. This specific model was selected because of its conceptual framework relevant to youth. Participants included 179

children between the ages of nine and 12, and were part of a larger intervention study that was assessing a family strengthening program in an urban, mid-sized public school district (unspecified location). A total of 16 participants responded, “yes” to the question, “Have you ever thought about killing yourself?” Out of these 16 participants, 72% reported formulating a plan for suicide in the previous 12 months, and 31% reported attempting suicide one or more times. These self-reports showed higher suicidal thoughts among males and African-Americans. Findings showed the following factors contributed to suicidal thoughts (other than depression and psychopathology): parent-child conflict, poor parent-child communication, disorganized family functioning, low school-connectedness, ways of coping internalized, early puberty, use of weapons or alcohol. Additional findings within this study, and factors that may contribute to thoughts of suicide, include: isolation, association with persons who have attempted or committed suicide, being bullied or bullying, substance abuse, lack of family connectedness, irritability, witnessing violence, experiencing abuse and difficulties in school. Although Riesch et al.’s (2008) study is relevant and important for education research, there was no mention of a school counselor’s role in youth suicide intervention.

“While the actual number of completed suicides is low, the number of elementary school-age children who appear to have serious suicidal thoughts is sufficient to merit concern” (Fish, 2000, p. 22). Fish explored suicidal behavior in children and analyzed how existing suicide prevention programs need to be expanded to the elementary school level. “Knowledge is a precursor to awareness,” (Fish, 2000, p. 21), and awareness “in one’s environment involves insight and perception, and it can enable one to predict events” (Fish, 2000, p. 21). Fish emphasizes how knowledge is an effective tool in preventing suicide, and sought to dispel the myths about young children and suicide. Fish’s research states that suicide data for children

younger than ten does not exist, and therefore, misclassifications and misconceptions about childhood suicide is not possible to examine. In reality, children do complete suicide, and Fish explored five common myths, including: children under six do not complete suicide; suicide in latency years is extremely rare; children cannot be suicidal because they do not understand the permanency of death; there is limited research to show that younger children do in fact, suffer from depression. In a 1996 study, 505 children were hospitalized due to suicide attempts, and 75 of these children were between six and ten years old (Fish, 2000). Knowing that elementary school-age children have suicide potential, schools can have an integral role in educating youth.

### **Suicide and Elementary School-aged Children**

Sheftall et al. (2016) claim that suicide with elementary school-aged children is not well studied, “despite the increase in the suicide rate among black children in the US” (p. 1). These authors completed a study that aimed to “describe characteristics and precipitating circumstances of suicide in elementary school-aged children relative to early adolescent decedents and identify potential within-group racial differences” (p. 1). The National Violent Death Reporting System (NVDRS) was the source used to collect the data of youth between the ages of five to 14 with suicide as the cause of death between the years of 2003 to 2012 from 17 states in the United States (data was restricted from other states) (N=699). The NVDRS defines suicide as, “death resulting from the use of force against oneself when a collection of evidence indicates that the use of force was intentional” (p. 2). The NVDRS also collects the following information: mental health history and treatment, substance use, abuse, physical history, relationship problems, school problems, legal problems, other stressful life events, and suicide-related circumstances. The data collected was examined for comparisons between the age groups: 5-11 and 12-14, race: Black and Non-Black (Non-Black group representing all other races because the number was too



small for meaningful comparisons among specific racial groups). The groups were also compared by: demographics, time/place of injury, suicide method, precipitating circumstances, toxicology findings, mental health diagnosis, alcohol/substance abuse, and history of mental health treatment.

Out of 699 cases of youth suicide, 693 were deemed appropriate for this study based on some incidents being misclassified as suicide (87 children between 5-11, and 606 between 12-14). The analysis of these cases found that young children who died by suicide (5-11 years), compared to early adolescents (12-14), were more commonly Black males, and died at home by hanging/strangulation/suffocation. These children were also found to have more relationship problems with family and friends, less often had boyfriend/girlfriend problems, or left a suicide note; they more often experienced attention-deficit disorder (with or without hyperactivity), and less often experienced depression/dysthymia (persistent, mild depression). This quantitative, multistate study is important for this paper because it helps frame the importance for future prevention efforts targeted to elementary school-aged children. The investigated differences in characteristics and potential circumstances leading toward suicide in elementary school-aged children versus early adolescents suggests the need for suicide prevention for each of these important developmental periods, with both common and differential strategies. Given some similarities for Black and Non-Black elementary school-age children, it is suggested that universal suicide prevention strategies can be appropriate; however, there is a need for more research about the necessity for prevention efforts to encompass more diverse strategies based on race, developmental level, or ethnicity. Since interpersonal problems were a precipitating factor for both age groups, an intervention program found to be successful in improving interpersonal skills is the Promoting Alternative Thinking Strategies Programs (PATHS), a curriculum –based

instruction to help children understand topics understanding the regulation of emotions. These researchers recommend investigation of potential factors that may have contributed to the increase in suicides among Black elementary school-aged children and be able to identify predictors of suicide in young children that are race-specific (Sheftall et al., 2016).

Review of this literature shows that suicide is prevalent among adolescents and there are many well known risk-factors among this population. The literature also reveals that younger adolescents and elementary school-age students are also at risk for suicidality, however a lack of research exists to support evidence about this specific population. Historically, suicide education has been in place for older students, with mixed results.

### **History of Suicide Education**

Although suicide can be a frightening and incredulous topic for teens, the reality of adolescents completing suicide is an important topic to discuss. Suicide is a topic that falls within educating youth about mental health and emotional well-being. Having truthful discussions about mental health and suicide not only provides awareness and knowledge, but can also offer students information about professional referrals, how to communicate effectively with family, friends and trusted adults, and obtaining support and safety.

A group of clinicians with an interest in suicide and prevention began the first prevention efforts in the United States in the 1950's. These efforts continued to expand, and in 2001 the National Strategy for Suicide Prevention (NSSP) was first released by Surgeon General David Satcher as a document launching an organized effort to prevent suicide in the United States (NSSP, 2012). With the goal of increasing understanding and the link between health issues and suicide, and with newer interventions, the NSSP revised their document in 2012.

The Council for Accreditation of Counseling & Related Educational Programs (CACREP) assures that university programs that prepare counselors meet consistent and evaluated standards set in the counseling profession. In 2009, CACREP required that school counselors “understand the potential impact of disasters and crises on the school community and that they have knowledge of the skill necessary in managing disasters” (Fineran, 2012, p. 16). In 2016, CACREP elaborated these standards to specify that professional school counselors know “procedures for assessing risk of aggression or danger to others, self-inflicted harm, or suicide” (p. 11), and must also know the “characteristics, risk factors, and warning signs of students at risk for mental health and behavioral disorders” (p. 31).

According to Robinson et al. (2012), little is known about effective interventions for managing suicidality in adolescents. The current research discussed in this paper reviews the schools’ recognition of needing suicide prevention and the various ways they are implemented within school-based programs including universal interventions and selective interventions. Universal interventions include schoolwide programs with the aim of reducing suicide-related behaviors for all students. Selected interventions encompass “gatekeeper training,” with the goal of increasing knowledge of youth suicide and suicidal behavior, risk factors, and warning signs, as well as altering attitudes toward intervention. Other selected interventions include screening programs that focus primarily on the early identification of youth who may be at risk.

Although information about school-based suicide prevention programs at the elementary level is almost non-existent, the research including these programs at the middle and high school level demonstrate the importance of early education (Koukel & Jacobs, 2013; Roswarski & Dunn, 2009). Furthermore, in the tragic event of a suicidal death of a student, little research has been identified with school-based postvention at the secondary level, and especially elementary

level. Postvention is an area of research that has been covered extensively in the medical field, specifically nursing, so the lack of research is concerning about how the school community could effectively support those impacted by such a tragedy. And with the alarming statistics of adolescent suicide rates, and the assumption these adolescents are in fact a member of a school community, this poses several questions for future research including the level of preparedness in the event a student dies by suicide, how it will be addressed to the community, and the level of confidence felt by school personnel in managing such a crisis event.

### **Implementation of Suicide Education in Schools**

The stakes in education as a whole have become increasingly higher in regard to academic rigor and pressure for success, as well as pressure to keep up physically and socially. As a result of increased pressure, adolescents are demonstrating higher levels of anxiety than shown in the past, depression symptoms have become more prevalent, and suicidal ideation continues to increase. These are only some of the risk factors that have led to adolescent suicide. Sattem's (1990) research specifies the "consensus that caregivers would prefer to identify those individuals at risk early, and to teach coping, mental health skills, and other preventative measures, as opposed to 'picking up the pieces'" (p. 329).

Recent research shows that adolescent suicide continues to be a growing problem in our society, yet there is still a lack of findings to demonstrate that suicide awareness programs are being implemented in schools; in spite of the lack of research found for suicide education in elementary schools over a decade ago. In 2000, Fish discussed the implementation of preventive school-based programs with the focus of reducing childhood suicide. This research highlighted the findings of Kalafat and Elias' (1994) evaluation of school-based suicide awareness programs and their effectiveness at the secondary level, but did not include programs at the elementary

school level. Gould, Greenberg, Velting, & Shaffer (2003) reviewed school based prevention programs over the prior decade based on: suicide awareness curriculum, skills training, screening, gatekeeper training, peer helpers, and postvention/crisis intervention. These researchers didn't find sufficient evidence regarding curriculum, however they found encouraging data regarding skills training, and further research was recommended for this type of intervention. Screening as a prevention strategy was found to be promising, but there are many factors needing to be addressed, such as "false negative" results, less acceptance by school principals compared to staff training, and the success of screening as dependent on the effectiveness of the referral. Gould et al.'s findings on the effectiveness of gatekeeper training (training programs for school personnel to identify suicidal youth), is limited, however encouraging. Insufficient evidence was found regarding peer helpers (programs based on the notion that peers are more likely to confide in other peers than adults) and the efficacy and safety of these programs. School-based postvention programs had very limited research and Gould et al. discuss the importance of being prepared for this type of crisis intervention in order to provide the best support for survivors within a school.

Fish's (2000) findings demonstrate a great need for the elementary schools to implement such, based on the notion that children in this age group do have the ability to plan and carry out a suicide. Fish discussed suicidal behavior in young children and stated the importance of the school nurse's role in educating teachers and parents about suicide prevention. Although Fish's research is important in the field of education, there was no mention of the school counselor's role.

### **School-based Suicide Prevention and Education Programs**

Given the prevalence of suicidality among adolescents, Erickson and Abel (2013) examined this nationwide problem and school-wide screening programs. This study includes a description of one implemented high school prevention program that uses screening for depression and suicide risk, classroom guidance, and mental health service referrals. Several school districts have utilized such models of suicide prevention with efforts including educating youth from as early as elementary school, although little suicide prevention research has been conducted at this juncture.

Studies have shown mixed results in the evaluation of school-based suicide programs. The specifically targeted psycho-educational programs have shown effectiveness to increase knowledge and awareness about risk factors and warning signs of depression and suicide. Although it is not clear whether school-based suicide programs reduce suicidal behaviors, there is evidence to show a reduction in suicide vulnerability when these programs teach problem-solving and coping skills (King et al., 2011).

Surviving the Teens Suicide and Depression Awareness Program is a school-based suicide prevention program developed by Catherine Strunk, a Registered Nurse. This is a four session (50 minutes each) high school program that provides factual information about depression risk factors, suicidal signs, myths about suicide, and also offers students strategies to cope with stress and sources when needed. The major focus is to teach students how to cope and recognize depression and suicidal behaviors and how to help someone for whom they have concern. Moreover, students are taught ways to increase self-esteem, manage anger, communicate more effectively and to resolve conflicts effectively. Over 1,000 students participated in this program in Cincinnati schools, and results showed students were significantly

less likely to be considering suicide after a three-month follow up. These findings show tremendous support for suicide prevention education in schools (King et al., 2011).

Another school based intervention program for middle and high schools that has shown effectiveness is Signs of Suicide (SOS) (Buchman-Schmitt et al, 2014; Sheftall et al., 2016). SOS teaches students about suicidality and how to take action to prevent it. They learn how to recognize warning signs of potential suicidality, to provide support and empathy for at-risk peers, and ways to access help. In a randomized control study, SOS showed a 40% reduction in self-reported suicide attempts (Aseltine, James, Schilling, & Glanovsky, 2007).

Question Persuade, and Refer (QPR) has also shown effectiveness in educating students. QPR is a program that teaches students and school staff to recognize warning signs and how to seek resources that are available to assess and treat those at-risk. Research has found that QPR effectively educated individuals and facilitated more accepting attitudes toward suicide. (Buchman-Schmitt et al., 2014)

Robinson et al. (2013) identified the lack of research regarding effective interventions for managing suicidality. The purpose of this study was to review the empirical literature on the various suicide prevention and postvention programs provided within secondary schools. These researchers used a comprehensive systematic search of databases using specific terms and a total of 412 studies were selected as meeting the research criteria. Of these studies, a total of 15 studies met the inclusion criteria for this research review and school programs between the years of 1988 and 2011 were examined. A majority of these were in the United States. These involved students from eighth through twelfth grades and sample sizes ranged from 128 to 4,133 participants.

This study aimed to measure the outcomes of: reducing suicide-related behaviors, knowledge of suicide, changing unwanted attitudes toward suicide, and help-seeking behavior. All of the universal suicide prevention programs reviewed showed positive effects in the knowledge of suicide and some showed a reduction in suicide-related behaviors. The research in gatekeeper training was the most promising intervention for schools. This training showed effectiveness in increasing knowledge, improving attitudes, and fostering confidence among participants. All of the intervention programs researched showed a reduction in suicide risk behavior, although further research is needed in this area. There were only two studies on postvention identified for this research study, indicating a great lack of necessary empirical data. Robinson et al. notes there may be ethical challenges conducting postvention studies, however “given the rates of youth suicide, the risk of suicide clusters in school settings, and the availability of robust program evaluation methodologies- this continued lack of evidence pertaining to suicide postvention is disappointing” (p. 178).

Wolfe et al.'s (1998) research, part of a larger study, examines five specific areas regarding school prevention and postvention programs, and the factors that may prevent a school from having such programs in place. It also examines the frequency of in-service programs provided for school personnel in Ohio. Wolfe et al. sought to examine “the relationships between the availability of postvention programs, frequency of in-service programs, and number of perceived attempted suicides in schools, as they relate to the availability of prevention programs in schools” (p.427). These researchers recognized the increasing rate of suicide in Ohio, and they sought to explore the school prevention and postvention programs in place. This study also examined the frequency of in-service related to prevention programs, as well as the relation to having a high number of attempted suicides. This quantitative study surveyed 1,270



administrators, counselors, and teachers throughout the state of Ohio, including both rural and urban areas. A random stratified sample was provided by the State Department of Ohio with an equal number of schools from the four quadrants in the state. The Suicide Program Survey was mailed to this identified group with a 42% response rate. Participants were made up of 431 males and 836 females (3 participants did not identify gender). The majority of respondents were within the ages of 41 through 50.

Using Chi Square to analyze this data, the results of the study showed that Ohio did not show much progression in the development of suicide prevention and postvention programs, however, the survey did demonstrate the need. A significant relationship was shown between the availability of postvention programs and the knowledge of these programs by staff. Sixty-one percent of administrators and 78% of counselors reported their schools did have a postvention program, compared to elementary teachers reporting there was no program (25%) and admitted they did not know if there was in fact a postvention plan (57%) (Wolfe et al., 1998).

More detailed findings from this study do support the researcher's predictions about the lack in progress of suicide prevention and postvention programs in Ohio schools, "looking at the questions dealing with why this is so, it appears that suicide is an issue that is a non-issue" (p.435). Wolfe (1998) concluded one of the main implications of this survey is that, "school personnel are willing to sit back and wait until a suicide occurs before responding. A frightening number are content to be unaware of the increasing numbers of students who are attempting suicide" (p. 435). Wolfe goes on to comment, "Perhaps having no plan in place makes this 'head in the sand' phenomenon easier" (p. 435). With 97% of the respondents saying there is rarely or never suicide prevention in-service in their schools, and with the data showing lack of basic knowledge by elementary teachers, it is hopeful that education and training will be provided to

help school personnel “recognize the developmental importance of beginning prevention programs early” (p. 436).

### **Best Practices in Suicide Education for Elementary School Counselors**

It is disheartening to find the latest research regarding elementary school suicide prevention is from 1990. In Sattem’s (1990) research, an example of a youth-system-based prevention and early identification process for elementary school is provided. A prevention program using puppets was designed “with the development and maturational stages of children in mind, balanced with the issues that are found with suicidal children: overwhelming feelings of grief and loss” (p. 345). This program, Project Lifesaver was used for a research project in 1985 as an effort to document the need for such a program within two school systems, to provide a resource to implement within the schools, and to prepare college-level curriculum for teachers, counselors, administrators, nurses, and social workers. Project Lifesaver was presented to students in grades Kindergarten through sixth, and focused on expression of feelings, utilization of resources, and death education. This demonstrated to the children that many feelings and emotions surface naturally when a person has experienced a loss. Findings showed that girls were more willing than the boys to express themselves in this forum at all grade levels.

Following a serious attempt of a 13-year student in a large, urban school in Ontario, Canada, Romano-Dwyer and Carley (2005) researched the implementation of “suicide talks.” The authors explored the “contagion” phenomenon and how fear, worry, and anxiety can breed misconceptions. The students began writing in their journals about hopelessness and concerns for their peers. Following the attempt of a student, six others “slashed” their arms, and it was clear that interventions needed to be implemented. The school social workers began to provide “reflective” conversations and found “how a school community can be used as a therapeutic

structure to re-shape the day-to-day reality of its students, parents, and staff” (p. 246). Following the work of these professionally led discussions with students, there were no further disclosures about hopelessness or children slashing their arms. It was also found that students were less frequently teased or bullied. It isn’t clear whether these changes were a direct result of “suicide talks,” however the authors believe in the power of conversations and allowing children to make sense of their work with each other (Romano-Dwyer and Carley).

It is a myth that discussing suicide with young children will put ideas in their head, or that young children are incapable of carrying out such an act. Romano-Dwyer and Carley (2005) raise the question of when families and communities should in fact talk to students about suicide, and whether or not pressure is being made to prevent these topics with younger age students. The gap in current research shows limited information about suicide education with ten to thirteen-year old students. And with a recent controversy among educational professionals and the parent community regarding the book, *Thirteen Reasons Why* (Asher, 2007) turned Netflix series, there is a great need for suicide talks in the schools. The main character in this series tells her powerful story including painful experiences that lead to her completion of suicide. Her story can lead impressionable viewers to identify with these experiences and “romanticize the choices made...and/or develop revenge fantasies” (National Association of School Psychologists, 2017, p. 1). Teenagers are binge watching this series, and “while many youth are resilient and capable of differentiating between a TV drama and real life, engaging in thoughtful conversations with them about the show is vital” to process the serious issues being addressed. (National Association of School Psychologists, 2017).

The literature shows that middle and high schools are implementing suicide education as a source of prevention, and this support is effective. However, there is a gap in the research about whether or not this education is being implemented in the elementary schools.

### **School Personnel Training**

The field of education does recognize the rise in youth suicide and the importance of continuing to train school professionals on identifying students at risk. The type of staff training differentiates and may range from school-wide to county-wide, and trainings may be specific to teachers or school support personnel. Although training programs vary, each state has a form of suicide prevention, and the American Foundation for Suicide Prevention (AFSP) urges every state to mandate that school professionals complete this training annually. As of 2016, ten states have mandated annual training and 17 states mandated non-annual training. Fifteen states, including Virginia, encourage, but do not mandate this training (AFSP, 2016). Many districts are also promoting education awareness to parents and may partner with community based resources to help provide these trainings. Effective July 1, 2017, legislation SB 1117 in the state of Virginia, requires school counselors for initial licensure and renewal licensure to complete training in the recognition of mental health disorder and behavioral distress, including depression, trauma, violence, youth suicide, and substance abuse (Virginia Legislative System, 2017). This new state legislation shows the importance that school counselors play in supporting students at risk and providing suicide prevention and intervention.

**Gatekeeper strategy.** A well-researched training to help school professionals identify a suicidal student is called a “gatekeeper” strategy, and has been successful for detecting youth in schools who are at risk. A trained gatekeeper is any person in a school environment, student or personnel, who learns the skills to help, should they come into contact with a person at-risk

(Koukel & Jacobs, 2013). Burnette, Ramchand, & Ayer (2015) comprehensively reviewed the literature on gatekeeper training and concluded four important factors that can influence intervention behavior: improved knowledge of suicide, foster more adaptive beliefs and perceptions about suicide prevention, decrease reluctance to intervene, and self-efficacy. Although there is increasing evidence that training affects knowledge, beliefs, and reluctance, further research on how enhancements in these factors transform to intervention behavior and changes in suicide rates is needed.

**Applied Suicide Intervention Skills Training (ASIST).** The Suicide Prevention Resource Center (SPRC) is a method of gatekeeping and provides an intensive training to professionals to deliver Applied Suicide Intervention Skills Training (ASIST). SPRC designed the following objectives for its participants:

- Recognize that caregivers and persons at risk are affected by personal and societal attitudes about suicide.
- Discuss suicide in a direct manner with someone at risk.
- Identify risk alerts and develop related safe-plans.
- Demonstrate the skills required to intervene with a person at risk of suicide.
- List the types of resources available to a person at risk, including themselves.
- Make a commitment to improving community resources.
- Recognize that suicide prevention is broader than suicide first-aid and includes life promotion and self-care for caregivers. (Suicide Prevention Resource Center)

Cornell, Williams, and Hauge (2006) examined the effectiveness of two training programs with Virginia school personnel, ASIST and QPR. This quantitative study provided support of these trainings to help identify potentially suicidal students. The Student Suicide

Prevention Survey was developed with the Virginia Department of Health based on the curriculum of the trainings and given to a group of teachers, school counselors and other school personnel (N=373) after training had been received (within an average of six months after training). This group was compared to a group of school personnel (N=249) who had not yet received training. Findings from this study showed significant differences among the two groups based on number of student referrals made for mental health assistance outside of school, with the possible explanation that trained personnel felt more confident in addressing suicide assessments within school versus referring outside of school. ASIST training was associated with greater effects compared to QPR in several areas, such as: the number of contracts made with students not to harm themselves and few reported suicide attempts.

**Project SOAR.** King and Smith (2000) researched the effectiveness of a school counselor training program, Suicide, Options, Awareness, and Relief (Project SOAR) in Dallas, Texas. School counselors had participated in a mandatory SOAR training that included intensive suicide prevention training. The aim of this course was to assist counselors in developing their crisis intervention skills, ability to assess severity of students at risk, and to refer these students to professional agencies. Activities included the examination of attitudes toward suicide, knowledge about crisis theory and suicide dynamics, and strengthening empathy and listening skills. Counselors also participated in activities to develop comfort in using a counseling model for crisis intervention. These school counselors were assessed regarding their knowledge of risk factors and ability to take action when met with a student showing signs of suicidality. The findings from the school counselors surveyed (N=186) in this quantitative study revealed the following: 75% school counselors felt knowledgeable about the district policy on suicide, more than half reported understanding crisis theory, 74% reported knowing how to refer a student to a

community mental health professional, and 68% believed that teachers and staff would refer a suicidal student to the school counselor. The results from this study reveal the effectiveness of Project SOAR on school counselor's efficacy in suicide prevention and intervention.

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

Comprehensive school counseling programs have adopted the American School Counseling Association's (ASCA) National Model to incorporate initiatives that support the whole child in their school success, including his/her academic, social, and emotional growth (ASCA, 2012). Suicide prevention and intervention efforts are implemented in alignment with ASCA's national standards to provide prevention, early identification, and intervention for all students in order to minimize or eliminate harmful behaviors that place students at risk. ASCA's position statements specify the school counselor role to include:

- providing classroom guidance lessons to increase student knowledge and awareness of the dangers of harmful behaviors as well as promoting resiliency and success skills
- providing responsive services, including short-term individual, group counseling
- referring students and families to appropriate support services and community agencies
- collaborating with school staff to identify and assist students in crisis
- conducting staff development for school and district staff (ASCA, 2012)

Some school districts have started implementing depression screenings with students entering middle and/or high school with the goal of early identification of at-risk youth; Horowitz et al.'s (2009) research supports that targeting suicide screening in schools, "may be the most effective way to recognize and prevent self-harm" (p. 620). Professional school

counselors are accessible to students and possess the training to provide support to students in crisis within a school setting and provide referral resources to families. These professionals are also trained and knowledgeable to provide suicide educational awareness within a classroom and/or group setting.

Prevention efforts specific to Virginia secondary schools include grade-level presentations regarding mental health concerns, such as anxiety, depression, and signs of suicide risk (Board of Education Commonwealth of Virginia, 2003). These discussions are led by school support professionals such as school counselors, school psychologists, or school social workers with the goal of providing awareness, dispelling myths of suicide, and educating students about available support. Further prevention efforts are implemented into the health education curriculum. Within class discussions, students are encouraged to explore mental health issues and suicide risks.

There is sufficient evidence showing the implementation of suicide risk training in school psychology programs and nursing programs (Kuo, Stoep, Herting, Grupp, & McCauley, 2013). However, there is limited to no evidence showing this training in counselor education programs, in spite of the importance of the school counselor role in K-12 school settings. (Liebling-Boccio & Jennings, 2013).

### **Suicide Risk Assessments**

School intervention efforts typically begin when a student is identified at risk for suicidality, either by a referral from a parent, peer, community member, staff, or self-referred. In regard to safety, risk assessment team members would meet with the student once a referral is made and interview him/her immediately upon referral to further determine a level of risk. Although schools each have their own protocol, Koukel and Jacobs (2013) suggest these



minimum school responses: addressing risk level of suicidality, notifying parent/guardian, contacting police/child protective services if deemed necessary, providing supervision for student, securing mental health services, and providing follow-up with student. Immediately interviewing the student can give an assessment of the risk level of student suicidality. Detailed questions should include frequency and duration of suicidal thoughts, previous attempts, having and/or describing a plan to hurt oneself, and how general or specific the plan is, as these will help determine the level of risk. If a student articulates having a plan for committing suicide and/or the means to do so, he/she should be considered high-risk (Koukel & Jacobs, 2013).

A parent or guardian of a minor must always be contacted when an assessment of a minor's safety is questioned. In this case, "school personnel must realize that the duty to notify a parent trumps student confidentiality" (Koukel & Jacobs, 2013, p. 4). The individual making the student assessment will make an appropriate recommendation based on the level of risk. Youth identified as immediate risk, and as being a danger to him/herself will be urged to see a mental health provider outside of school or go to the hospital emergency room. In the event of a parent/guardian who does not accept the information as a danger to the child, or if the parent/guardian is suspected of abuse or neglect, the school will need to contact local police or Child Protective Services for transport to emergency services (Koukel & Jacobs, 2013).

Once a student has been identified as exhibiting any level of at-risk suicidal behavior, he/she will need follow-up support by a school support professional. The student may need assistance communicating with teachers in regard to missing class and assignments. Additionally, he/she may be referred to a school support group. School support groups are developed based on the need of a school population. There is much research to support mindfulness-based interventions in schools in order to educate students and offer techniques to

reduce stress and anxiety (Kallapiran, Koo, Kirubakaran, & Hancock, 2015). According to Zack, Saekow, Kelly, and Radke (2014), mindfulness tools and techniques are becoming more common to help address those experiencing anxiety and/or stress.

### **Early Identification in Schools as Suicide Prevention**

As many as 20% of youth in the United States experience a period of time with major depression by the age of 18, and as many as 65% of adolescents reported feeling depressive symptoms (Kuo, et al., 2013). This health problem among adolescents led Kuo et al. to research the best method of identifying depressed students in order to provide intervention. Additionally, this research found that adults who experienced depression as adolescents are at increased risk for: recurrent depressive disorders, substance use disorder, impairment in vocational and social roles, chronic health problems, and suicide. In this study, Kuo et al. sought to find the most cost effective manner in which to screen adolescents at-risk. These authors researched a variety of prevention models in the schools including: universal, selected, and indicated. A universal program includes all students regardless of their level of risk. Selected programs target those students considered at risk due to an experience such as parental divorce, history of clinical depression, or traumatic event. Indicated interventions enroll adolescents who are identified as clinically depressed. (Kuo et al., 2013)

This quantitative research study was conducted with middle school children in Seattle, Washington. This district was comprised of ten middle schools. The instrument used to screen students was the Mood and Feelings Questionnaire (MFQ), a 33 item self-report questionnaire. Screening was conducted with 2,006 students (60.5% of district population), and 627 (31.3%) were found eligible for intervention based on the MFQ. Chi-square and t-tests indicated significant difference between the ineligible and eligible students. The eligible student group was

comprised of students with higher absenteeism, lower GPAs, more disciplinary actions, more often female, and more likely to be in special education, or ELL, more often spoke a first language different from English, and more often were from a non-Caucasian race.

Although school record review is much less costly (\$0.25 per student) than universal depression screening (approximately \$7.00), the findings from Kuo et al.'s (2013) study indicated that school record review was not as effective as universal depression screening. However, there isn't a formula for identifying adolescents for indicated depression interventions and little research has been given to this aspect.

Vander Stoep et al.'s (2005) research reveals that as many as 1 in 10 children suffer from a mental, behavioral, or learning problem that impacts their functioning ability in school or in the community. Schools are a safe place for children to attend regularly in a stable environment, therefore, schools are the appropriate place to administer tools to help identify early screening for depressive symptoms. Vander Stoep et al.'s quantitative research study implemented the Developmental Pathways Screening Program (DPSP) in four urban Seattle middle schools with students entering sixth grade. The instruments used were the Mood and Feelings Questionnaire (MFQ) and Youth Self Report (YSR) with 861 students screened. Parents and guardians were notified by letters mailed home and given the permission to opt-out their child. Mental health professionals administered these tools to students and 15% of participants were identified as positive for emotional distress (15%), with a disproportionate high number of African American and Asian American students. Referrals for these students were made to school counselors, tutors, after-school activities, and mental health agencies. This study showed that implementing universal emotional health screening within a school setting has several benefits, including early identification of students at-risk. However, this study also discusses potential risks to screening,

such as the need for so many children identified and not having enough resources to provide support, potential “false-positive” can cause unnecessary concern, and the possibility of stigmatization for those screening positive.

In assessing students at-risk for suicidality, it is not surprising to find the reviewed literature shows that school counselors with training and experience feel more confident in intervening with this population. Viewing this from a theoretical perspective can help frame the importance of these factors.

### **Social Cognitive Theory**

Through Bandura’s studies with young children and how they develop aggressive behavior, he and his colleagues focused on the value of modeling for acquired behaviors and proposed Social Cognitive Theory (SCT). This theory places emphasis on the cognitive processes involved with learning, and assumed that learning and behavior have a triadic reciprocal relationship with the environment (Gregoire & Jungers, 2007). Social psychologists agree that an individual’s environmental upbringing contributes to behavior, and the individual and their cognitions are all central factors in influencing development. A further explanation is how behavior that is actually witnessed can in fact change a person’s cognition, or way of thinking. Similarly, the environment in which one is raised may influence later behaviors and affect decisions.

Self-efficacy is one of the most strongly influenced components of SCT. This term, originally developed by Bandura (1986), “is the BELIEF in one’s capabilities to organize and execute the course of action required to manage prospective situations” (p. 2). These beliefs influence the choices we make and the amount of effort we choose to put forth. Self-efficacy will determine the level and duration of individual persistence when faced with obstacles and

challenges toward the goal. Additionally, an individual's self-efficacy affects the way he/she feels (Harris-Bowlsbey & Niles, 2009).

A second component of SCT is outcome expectations. These are an individual's belief about the consequences of given actions or what they imagine will occur after performing a certain behavior. There may be extrinsic reinforcement or a tangible award upon successful completion. There could be emotional satisfaction, such as feelings of pride or gratification upon success.

In Moon et al.'s (2015) research study, their model hypothesized that adolescents who have been victimized and have a low self-efficacy are more affected by peer victimization versus their peers demonstrating high self-efficacy. Furthermore, the impact of peer aggression on the adolescent with low self-efficacy feels greater because he/she perceives nothing can be done to change the aggression that is occurring. "Once the adolescent has lost a sense of control over the environment and is unable to persevere in the face of difficulty, he or she may experience decreasing control over subsequent thoughts, feelings, and behaviors. Bandura (1991) referred to these subsequent thoughts as self-hindering because decreases in self-regulation increase the likelihood of non-desirable behaviors" (Moon et al. 2015, p. 260).

A research study conducted by Valois, Zullig, and Hunter (2015) investigated the relationships between emotional self-efficacy and suicidal ideation and behavior among high school age students. These researchers view emotional self-efficacy as, "an aspect of self-efficacy that pertains to the perceived capability of coping with negative emotions" (p. 238). Valois et al.'s (2015) findings indicated that low emotional self-efficacy is associated with the individual's consideration of suicide, and the results showed most prevalence among the population of Black males and females, and White males.

### **Self-efficacy in Educators**

The training that school support professionals receive to feel confident and prepared in supporting adolescents at-risk of suicide can be viewed from the lens of Bandura's self-efficacy. Research has shown that the curriculum provided in graduate training, participation in workshop/in-services, counseling experience with specific issues, and years of experience are all factors that influence school counselor self-efficacy (Lent, Hill, & Hoffman, 2003). Providing effective suicide prevention and intervention in schools would entail the support from knowledgeable and confident school professionals.

Theoretically, interventions are implemented in schools to assist in alleviating the risk factors identified with suicidality. With suicidality being a fearful term, it makes sense that the level of self-efficacy in school professionals who are providing the support within these programs plays a factor that is limiting the delivery of this education awareness beginning in elementary school. In King, Price, Telljohann, and Wahl's (1999) study, a national sample of high school health teachers completed a survey of 45 questions to determine their level of self-efficacy in regard to students at risk of suicide. Most of the teachers from this randomized sample of 228 respondents were White females and held a Master's degree. Findings from this study revealed that health teachers do believe the value in their role to educate and support students at-risk of suicide, however, only 9% of respondents felt confident in their ability to identify a student at-risk of suicide.

King and Smith's (2000) study with school counselors mentioned earlier in this chapter, also supports how appropriate training can improve efficacy rates among professionals working with suicidal students. With self-efficacy being the foundation of belief in one's capabilities, exploring the connection between education professionals' level of self-efficacy regarding the

delivery of suicide education and the cause for a lack of these programs in place can be useful in future educator training. The collection of this research is necessary to help education professionals be better knowledgeable and confident in effectively implementing suicide awareness in youth.

A person's development of self-efficacy can be viewed from the lens of the famous story, the *Little Engine That Could* (1930). The little blue engine was asked to pull a large train up a steep mountain after the larger engines had all refused given the task was so difficult. The little engine accepted the challenging task and kept repeating his motto, "I think I can." The little engine believed he could do it, even though no one else supported this belief, and he made the decision to pursue on. After he reached the top of the mountain, he repeated, "I thought I could." This is an excellent lesson still used with children today to express the power of optimism and hard work.

Self-efficacy is developed in four primary ways: performance accomplishments, vicarious experience, verbal persuasion, and emotional arousal/physiological and affective states (Bandura, 1994). The most directive is through *performance accomplishment*, which is based on direct personal experiences in which self-efficacy expectations are increased as a result of successes and lowered based on repeated failures. Thus, a person who has faced an experience, in this case of a student talking about suicide, and handled that situation successfully, will have a stronger self-efficacy about handling the next similar situation. Another effective way is through *vicarious learning*, which is the process of learning from other people's behavior. Individuals can witness observed behaviors of others, and then repeat the same actions on their own (Lent, Brown & Hackett, 1994). As a result of vicarious learning, individuals might refrain from

making mistakes if they have observed a negative outcome and can perform observed behaviors better if they see individuals complete them successfully.

*Social persuasion* is an additional way that people develop their self-efficacy. This involves consistent verbal encouragement from others and helps the individual overcome feelings of self-doubt and feel motivated to put forth their best effort at the task (Sharf, 2006).

*Physiological and affective states* are an individual's response and emotional reaction to a situation. The way a person feels about his/her abilities in a particular situation can be impacted by moods, emotional states, physical reactions, and stress levels (Sharf, 2006). Bandura has noted, "it is not the sheer intensity of emotional and physical reactions that is important but rather how they are perceived and interpreted" (Bandura, 1995, p. 5). One can improve a level of self-efficacy by learning how to reduce stress and raise mood when managing challenging situations. An example is an individual that feels emotional stress when public speaking who may not deliver effectively due to this level of stress. The individual can learn strategies to feel more prepared and confident and deliver successfully.

The SCT framework shows that concepts indirectly or directly affect each other and continue to do so throughout most of the life span. Sources of one's self-efficacy derive from gender, race/ethnicity, disability/health status, predispositions and learning experiences. Self-efficacy and interest are linked and interest can be developed or strengthened through modeling, encouragement, accomplishments, learning and social influences (Harris-Bowlsbey & Niles, 2009). This relates to school professional efficacy.

Social Cognitive Theory supports the findings in this quantitative study. Some notable findings include the increased self-efficacy among health teachers that were knowledgeable of having a crisis intervention team at this school. Another significant finding is that close to 50%



of the responding health teachers had a student identify suicide ideation directly to them, and this was also linked to higher self-efficacy. Therefore, teachers with experience of adolescent suicide felt more confident in their ability to support at-risk students (King et al, 1999).

Preparation of educators influences what occurs in the schools. Exploring the preparation provided to elementary school counselors and their level of self-efficacy to effectively implement suicide prevention and intervention needs to take place. This research is necessary to learn what is occurring and/or needs to occur in elementary schools.

### **Summary**

The literature studies reviewed within this paper highlight the prevalence of factors associated with and what is known about school-based programs dealing with suicide among adolescents. Given the numerous risk factors these adolescents may experience, there is significant need for suicide education as prevention beginning at the elementary school level. “Because children spend one third of their day at school, the school setting presents one of the best opportunities for early identification of at-risk behaviors” (Fish, 2000, p. 22). Additionally, as prevention is implemented in elementary schools and at-risk behaviors are identified, school counselors need to be prepared and feel confident in providing intervention support.

The conceptual framework from Joiner’s IPTS can be viewed as a conceptual framework when understanding and addressing the specific needs of adolescents at-risk of suicide. Bandura’s SCT and the factors within the basis of self-efficacy can frame the prevention and intervention provided by school counselors and focus on the individual’s exposure to experience and training and the critical role in delivering suicide support to students. Thus, the purpose of this study is to expand on prior knowledge related to adolescent suicide and explore current practices and perceptions of school counselors about the need for such practice at the elementary

school level. This study is designed to establish the current practices of elementary school counselors, their self-efficacy levels and perceptions regarding suicide education at the elementary school level, and how education and experience might impact the self-efficacy levels. The methodology for establishing this study is detailed in chapter three.

### **Chapter III**

#### **Methods and Procedures**

This research study was designed to explore the current suicide education as prevention and intervention programs in place in elementary schools in three public school districts in Northern Virginia. Additionally, school counselors' perceived self-efficacy in providing this practice within the elementary school setting was examined to help provide valuable insight regarding the need for specific training. The literature review discussed the need for implementation of suicide education in elementary schools and demonstrated why this topic is an important one to study. Therefore, it was hopeful the results of this study would have an impact on the future of providing suicide prevention and intervention in elementary schools. This chapter provides the methods and procedures for this study, including the participants, instruments for gathering data, and procedures for data collection and analysis. The methods and procedures were designed to answer the following research questions:

1. What percentage of elementary education school counselors in the surveyed districts report having implemented suicide education as prevention in their elementary school with 4<sup>th</sup> and 5<sup>th</sup> grade, and what do these programs entail?
2. What are the perceptions of school counselors regarding the necessity of suicide education programs in elementary school?
3. What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King Instrument?
4. To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development

activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide education in the elementary school?

### **Methods**

The focus of this exploratory study was to examine school counselors' knowledge of implemented suicide prevention and intervention programs in the elementary school setting and examine the school counselors' perceptions and beliefs about providing this practice.

Quantitative data was collected at one point in time as a cross-sectional perspective of participants using a survey research method. The survey used was a web-based questionnaire including a standardized instrument measuring self-efficacy, the King Instrument (King et al., 1999) (Appendix A), and also included selected demographic questions (Appendix B).

Elementary school counselors from three school districts in the Northern Virginia region were the selected population for this study.

The first three research study questions were answered from the survey questions. The fourth research question entailed running a regression analysis to determine the extent four independent variables (years of experience in the field, suicide education training in graduate school, participation in professional development activities and/or in-services, and previous experience with a student expressing suicidal thoughts) to predict the dependent variable, self-efficacy. The research questions and analysis plan are outlined in Table 3.1 and described in this chapter.

Table 3.1

*Research Questions and Data Plan*

Research Question	Purpose	Data Analysis Plan	King Instrument Questions
1. What percentage of elementary school counselors in the surveyed districts report having implemented suicide prevention in their elementary school with 4 <sup>th</sup> and 5 <sup>th</sup> grade? What is included in these programs?	To assess current suicide prevention practice in elementary school settings	Descriptive Statistics: frequencies, percentages, and/or means and standard deviations	3, 3b
2. What are the perceptions of school counselors regarding the necessity of suicide prevention programs in elementary school?	To assess the attitudes among school counselors regarding the need for suicide prevention in elementary school	Descriptive Statistics: frequencies, percentages, and/or means and standard deviations	1,3a,4a
3. What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King instrument?	To establish a sense of self-efficacy among elementary school counselors.	Descriptive Statistics: frequencies, percentages, and/or means and standard deviations	2, 5, 5a,5b, 8-18, 4b
4. To what extent are (a) years of experience in the field, (b) suicide education training in graduate school,	To predict self-efficacy among school counselor from key factors.	Multiple linear regressions; model will be assessed for significance using the omnibus F test and individual t-tests	5 (covariate), 6,7, 4, demographics

(c) participation in professional development activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor’s self-efficacy for providing suicide intervention in the elementary school?			
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**Participants**

The targeted participants for this study were practicing elementary school counselors, both part-time and full-time from three suburban school districts in Northern Virginia.

Participant demographic information was obtained by the demographic questions (see Appendix B).

The researcher’s professional role and background factored into the focus of the selected districts and potential to provide services within these schools. The school systems selected for research are all in close proximity to a large city, are middle to large sized districts, and have a racially and ethnically diverse student population comparable to the national profile of elementary schools. Therefore, it was anticipated that the results of this study can be generalized. However, these districts are considered academically high-functioning that may be a delimitation.

**Instrumentation**

Self-efficacy has been defined in this paper as “the degree to which an individual feels confident in performing a particular task” (Bandura, 1986, p. 391). Self-efficacy in educators has

been examined and reported in the literature related to working directly with suicidal students (King & Smith, 2000; King et al., 1999). There are a number of instruments that have been developed to measure school counselor self-efficacy including the Counselor Activity Self-Efficacy Scale (Lent et al., 2003), the Counseling Self-Efficacy Scale (Melchert, Hays, Wiljanen, & Kolocek, 1996), and the Counseling Self-Estimate Inventory (Larson & Daniels, 1998). However, the King Instrument (1999) originally developed to measure the confidence level among high school health teachers working with suicidal students was the selected instrument for this study. This selection was based on the measurement of self-efficacy used and specific at-risk population targeted with educational professionals.

### **King Instrument**

King, et al. (1999) developed an instrument to measure the self-efficacy of high school counselors in recognizing students at risk of suicide. This instrument was developed based on Bandura's self-efficacy model and consists of 31 questions that examine three subscales: efficacy expectations, outcome expectation, and outcome values regarding adolescent suicide. Respondents are asked to use a seven-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (7).

The original King instrument was developed to examine the self-efficacy of high school health teachers when working with suicidal students. The original King instrument consisted of 31 items, 14 of which focused on three specific components of self-efficacy that examined teacher knowledge in which respondents used a seven-point Likert-scale in response to each item. As was utilized by the author of the scale, if the respondents selected a 1, 2, or 3, it was considered disagree, and if they selected a 5, 6 or 7, it was considered agree. Selecting a 4 was considered a neutral response.

The instrument for this research study utilized the King Instrument with permission to modify the questions to focus directly on elementary school counselor participants (see Appendix C and D). In the present study, the King Instrument was adapted and used to examine the elementary school counselor's self-efficacy when managing students at risk of suicide. In order to modify the original instrument's focus from high school teachers providing suicide prevention to this study's focus on elementary school counselors' suicide intervention, some wording was substituted. For example, the item on the original instrument "I believe as a teacher, one of the most important things I could ever do is to prevent a student at risk of suicide from committing suicide," was changed to "I believe as a school counselor, one of the most important things I could ever do is to prevent a student at risk of suicide from completing suicide." Additionally, the terminology in the questions was changed from, "committing suicide" to "completed suicide," or "died by suicide." Freedenthal (2013) suggests using the term "commits" as being associated negatively and with wrongdoing, such as in the case of murder or rape; making the term "committing suicide" sound like a national crime. Those taking their own lives are in deep, emotional pain and therefore, using a factual term, such as "died by suicide" is most appropriate.

The original King Instrument (1999) included 14 questions relating to self-efficacy. Three of these questions were eliminated for use in this current study due to their non-contributing factors of the current research questions [I believe I can talk with teachers and counselors at my school to help determine whether or not a student is at risk of attempting suicide; I believe I can refer a student at risk for attempting suicide to a social worker or mental health professional; and I believe if I talk with teachers and counselors at my school to help determine whether or not the student is at risk of attempting suicide it will reduce the chance that



the student will complete suicide.] Therefore, the modified King Instrument measured counselor self-efficacy for providing suicide interventions used 11 items that focused on three specific components that match Bandura's (1997) theory of self-efficacy: (a) efficacy expectations (4 items), reflecting individual beliefs about his/her ability to perform behaviors yielding a specific outcome; (b) outcome expectations (5 items), reflecting the the individual's expectations that certain behaviors will result in a specific outcome; and (c) outcome values (2 items), reflecting the significance that individuals put on the expected outcomes of a specific behavior.

**Reliability and validity.** The King Instrument was given to six national experts on adolescent suicide and three national experts on self-efficacy to establish face and content validity. Principal axis factoring with varimax rotation was used to establish construct validity, and the eigenvalue of the factor scree plot indicated the survey did measure three factors: efficacy expectations, outcome expectations, and outcome values for adolescent suicide. All of these factors combined accounted for 63% of the total variance and confirmed construct validity.

The test-retest reliability for the King Instrument was proven with distribution of a survey to a sample of 10 school counselors on two separate occasions. The Pearson r correlation coefficients found the stability reliability was: efficacy expectations=.71, outcome expectations =.63, and outcome values =.67. Cronbach alphas assessed the internal consistency reliability for all three self-efficacy subscales with: efficacy expectations (.84), outcome expectations (.89), and outcome values (.60) (King et al., 1999).

### **Demographic Information**

Participants were asked demographic questions to gather the following information: gender, years of professional counseling experience, years at current school, race/ethnicity, educational level, grades served, participation in development activities and in-services regarding

suicide, and suicide training in a graduate school program (see Appendix B). This obtained demographic information was used to group participants into meaningful categories used as independent variables within this study.

### **Data Collection Procedures**

Permission to use the King instrument was obtained from the author. Permission to gather data from the selected school districts used in this study and the Human Subjects Institutional Review Board (IRB) of Virginia Tech was also obtained prior to any data collection. Some of the instrument questions were modified, therefore the revised instrument was distributed to a panel of experts to validate the instrument and provide any opportunity for the researcher to check data analysis procedures (see Appendix E). Any recommended changes were considered before distributing the final survey.

Data was collected for the questionnaire through a secure web-based program, Qualtrics. Participants received information about the study, informed consent (see Appendix F), and a direct link to Qualtrics to access the questionnaire.

### **Data Collection**

Data using The King Instrument was collected through the secure web-based Qualtrics. After permission from all parties was obtained (see Appendix G and H), the prospective participants were contacted by email (see Appendix I). The protocol in each school district involved the central office informing the participants of an upcoming research study, and the researcher followed by sending an email directly to participants.

The initial email sent to participants included information about the study and the researcher's contact information. Participants were also informed that the study was approved by the IRB at Virginia Tech and participation was voluntary and anonymous. A link was provided

to take participants directly to the online survey via Qualtrics. The first page contained the informed consent, rights of the participants, benefits and risks associated with the study, and a statement of confidentiality. Completing the survey implied their consent to participate. Participants were instructed to “continue to the next page” to begin the survey questions.

The Qualtrics survey link was available to participants for two weeks and a reminder message was sent after one week. A paper and pencil version of the questionnaire was offered to participants if requested by participant.

### **Data Analysis**

Prior to conducting the primary analysis, preliminary analyses were conducted in order to assess the state of the obtained data. In particular, missing data was analyzed to examine a pattern, and dependent on those analyses, appropriate imputations were executed. Preliminary analyses were also conducted in order to assess the assumptions of parametric analyses, including normality, linearity, and independence. Normality was assessed by examining the skewness, kurtosis, and mean to standard deviation ratio. Linearity was assessed with Pearson’s product moment correlations. Independence was assessed by examining for potential duplicate cases in the data.

Further preliminary analyses were conducted to assess the simple (bivariate relationships) between all demographics and other key outcomes to determine which, if any, need to be accounted for in primary analysis. These preliminary analyses were conducted to assess the relationships between demographics and outcomes, to determine whether or not these needed to be controlled for in primary analyses. Preliminary analyses did not yield any significant relationships, and therefore primary analyses were conducted as planned with no covariates. Cross tabulations with Pearson’s chi square test were used to examine if any relationships exist

between sets of independent variables (years of experience in the field, suicide education training in graduate school, participation in professional development activities and/or in-services, and previous experience with a student expressing suicidal thoughts). Relationships between linear variables were assessed with Pearson's product moment correlations. Lastly, relationships between linear variables by categorical variables was assessed through tests of difference.

*Research question one: What percentage of elementary school counselors in the surveyed school districts report having implemented suicide education as prevention in their elementary school, and what is included in these programs?*

*Research question two: What are the perceptions of school counselors regarding the necessity of suicide education programs in elementary school?*

Research questions one and two were measured using descriptive statistics to analyze the data. Frequencies, percentages, and/or means and standard deviations were included. Since little research has been conducted on suicide prevention practices in elementary schools, research questions one and two were designed to establish a sense of current practice, prevalence, and school counselor perceptions about suicide education with elementary school-age children.

*Research question three: What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King instrument?*

Descriptive statistics were used to analyze the data and answer research question three. Frequencies, percentages, and/or means and standard deviations were included. The King Instrument questions eight through eleven (4 items) measured overall efficacy expectations, twelve through sixteen (5 items) measured outcome expectations, and seventeen and eighteen (2 items) measured outcome values.

*Research question four: To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in-services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide prevention and intervention in the elementary school?*

Multiple linear regression was used to analyze research question four to predict confidence from key predictors. Further preliminary analyses were conducted to assess the simple bivariate relationships between all demographics and other key outcomes to determine which, if any, needed to be accounted for in primary analysis. The overall model was assessed for significance using the omnibus F test, and individual t-tests were used to assess the significance of each individual predictor. Measure of effect sizes used include R<sup>2</sup> for the overall model, and standardized betas for individual predictors. All analyses were conducted in SPSS v. 21 and significance was determined at the .05 level.

### **Research Rationale**

The research demonstrated within this paper identified the importance of researching suicide prevention and intervention in elementary schools as implications for school counselors, as well as training for school support professionals. The information discussed presents a dichotomy between what educators know about suicide and the necessary support, with what educators are actually implementing with students. There is a significant gap in the literature regarding these areas and further exploration was needed. This author proposed to explore suicide education programs with prevention and intervention that may currently be in place at the elementary school level, as well as explore the school counselor's perceptions about the need for

such programs to be in place, and the level of self-efficacy in regard to providing suicide intervention.

## Chapter IV

### Results of Study

This chapter focuses on the findings from the data collected to examine the need for suicide prevention and intervention and the elementary school counselors' perception of a need for this education. This chapter starts with an overview of the final sample, followed by the data cleaning and preparation phase. The description of the participants includes response rate and demographics. Next, there is a summary of the statistical findings of this study organized by research question and a regression analysis. Data reported from the King Instrument (adapted for elementary school counselors) include descriptive statistics for each item. All analyses were conducted in Statistics Package for Social Science (SPSS, Version 21) to answer the following research questions:

1. What percentage of elementary school counselors in the surveyed school districts report having implemented suicide education as prevention in their elementary school, and what is included in these programs?
2. What are the perceptions of school counselors regarding the necessity of suicide education programs in the elementary school?
3. What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as suicide attempt or student who died by suicide, as measured by the King instrument?
4. To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in-services, and (d) previous experience with a student expressing suicidal thoughts

predictive of a counselor's self-efficacy for providing suicide prevention and intervention in the elementary school?

### **Participants**

Target participants for this study were elementary school counselors (N=221) from three public school districts (District A, District B, and District C). Each district is a large suburban location in the mid-Atlantic region. From the population of 221 professional elementary school counselors, 102 started responding to the secure online survey instrument. A total of 98 participants completed the instrument for a response rate of 44% (98/221). Initial evaluation of demographics and outcomes by district yielded no significant differences,  $p > .05$ , indicating that there were no systematic differences across districts, so the sets of data can be considered equivalent. As such, all analyses reported were completed on the final dataset as a whole.

Electronic contact with all elementary school counselors was made on October 4, 2017. The primary researcher contacted the school counselors in Districts A and B directly, while the supervisor for district C contacted the school counselors in that district. The initial email contact included an invitation to participate, a description of the study, informed consent, and a link to the secure online questionnaire using Qualtrics. From the first contact, 46 completed questionnaires were submitted. A second contact was made on October 10, 2017, resulting in a total of 102 completed questionnaires (see Table 4.1). Although 102 questionnaires were submitted, the participants did not complete every item on the questionnaire. Therefore, the number of participants varies depending on which questions the respondents answered.

A summary of categorical demographic variables is presented below in Table 4.1. As shown, the highest number of participants were recruited from District C. The sample predominantly identified as being White. As Table 4.1 also indicates, the vast majority of the



participants held a Master's degree (69.4%), or a Master's degree plus additional coursework (29.6 %). All but six participants were female; and all participants were licensed by the state as professional school counselors.

Table 4.1

*Categorical Demographic Variables*

	<i>N</i>	<i>%</i>
<b>District</b>		
A	29	29.6
B	27	27.6
C	42	42.9
<b>Ethnicity*</b>		
White	82	
Hispanic, Latino	4	
Black or African American	11	
American Indian or Alaska Native	1	
Middle Eastern or North African	1	
Other Race, Ethnicity, or Origin	1	
<b>Level of Education</b>		
Master's Plus/Doctorate	29	29.6
Master's Degree	68	69.4
<b>Gender</b>		
Female	92	93.9
Male	6	6.1

*Note.* \* categories not mutually exclusive; frequencies not summing to 98 reflect missing data.

Means and standard deviations of continuous demographic variables are outlined below in Table 4.2. Participants had a mean age of 42.47 years ( $SD = 10.23$ ), and reported a mean of

11.4 years of professional experience. Participant years at the current school ranged from less than one year to 27 years ( $M = 6.49, SD = 5.81$ ).

Table 4.2

*Continuous Demographics*

	<i>n</i>	<i>M</i>	<i>SD</i>	<i>Min</i>	<i>Max</i>
Age	95	42.47	10.23	25	68
Years of Experience	97	11.40	6.94	1	30
Years at Current School	98	6.49	5.81	0	27

The school counselors were asked if they worked specifically with children in the upper elementary grades: four, five, and/or six. Of the counselors that responded, as displayed in Table 4.3, 93.9% worked with fourth grade, 94.9% worked with fifth grade, and 6.1% worked with sixth graders. The reason that a very small percentage of school counselors worked with sixth graders is that only one of the districts had sixth graders in the elementary schools.

Table 4.3

*School Counselors Working with Upper Grade Levels*

	<i>N</i>	<i>%</i>
4 <sup>th</sup> grade	92	93.9
5 <sup>th</sup> grade	93	94.9
6 <sup>th</sup> grade	6	6.1
Total	98	100.0

Additional variables explored the social class (Title I) of the schools within each district. A total of 32 elementary school counselors (30%) reported they work in a Title I school. A total of 14 (N=98; 14%) school counselors reported having a student attempt suicide since they

worked at their school, and a total of 86 (88%) school counselors reported having a student express suicidal ideation at their school.

Table 4.4

*School Counselors' Additional Demographic Variables*

	<i>n</i>	<i>%</i>
Working in a Title I school	32	33
Having a student express suicidal ideation	86	88
Having a student attempt suicide	14	14

### **Data Cleaning and Preparation**

Prior to conducting the primary analyses, the state of the obtained data was assessed to determine meeting the assumptions of all primary analyses. Additionally, missing data was examined to determine whether or not missing data would be problematic. Examination of missing data indicated that less than 5% of data was missing within each participant (respondents answered at least 95% of the questionnaire), suggesting that missing data would not impact primary analyses (Newman, 2014).

Prior to computing self-efficacy scores, the internal consistency of individual items was examined, which indicated excellent internal consistency ( $\alpha = .934$ ). Self-Efficacy scores were computed as mean scores, with higher scores indicating a higher level of self-efficacy.

Analysis of research question four used linear regression, which is bound by assumptions for normality, linearity, and multicollinearity. Given the relatively small sample size (i.e., < 250), liberal methods of examining normality were used, including the mean to standard deviation ratio, skewness, and kurtosis. Examination of these factors indicated that there was no significant deviation from normality for self-efficacy. Linearity is the notion that linear relationships exist

between independent and dependent variables, whereas multicollinearity occurs when the relationship between independent or predictor variables is so strong that these variables appear to be measuring similar if not identical constructs. To assess this assumption, Pearson's product moment correlations were conducted. Linearity was assumed for significant relationships. Multicollinearity was also assessed in primary regression analyses by examining the variance inflation factor (VIF) and Tolerance values. None of these indicators found significant violations of these assumptions.

### **Primary Analysis**

#### **School Counselor Implementation of Suicide Education as Prevention**

**Research question one:** What percentage of elementary school counselors in the surveyed school districts report having implemented suicide education as prevention in their elementary school, and what do these programs entail?

To address research question one, the first questionnaire item asked school counselors about implementing prevention programs. When asked about whether or not there was suicide prevention curriculum taught to students, a descriptive analysis of this question was conducted: "Does your school include teaching about suicide prevention in its curriculum with 4<sup>th</sup> and/or 5<sup>th</sup> grade students?" Only 7 participants (7.1%) reported that these services existed in their school.

Out of the seven counselors that responded *yes* to providing this education to students, one rated the program as *extremely effective*, one said *moderately effective*, four rated *slightly effective*, and one rated the program was *neither effective nor ineffective*. More than half of this group felt the program was slightly effective at best.

Several counselors provided written responses that reported there is no current suicide prevention in place. However, three school counselors did specify they provide bullying

prevention lessons, which may indicate a link in their perception between bullying and suicidal thoughts. Additionally, several school counselors specified suicide interventions that are provided for students should a student make any threat. For example, “We don't have a suicide prevention program in place as of now, but we do have a crisis team to respond to students with concerns.” Some school counselors provided detailed information about what is currently being done in their schools. Conducting a lesson using curriculum from the National Alliance on Mental Illness (NAMI) with fifth grade students was reported by four of the counselors, with mention of discussion about depression. One counselor reported, “We do a mental health lesson for 5th grade students. It's a one-time lesson, and we use the NAMI curriculum for the lesson. I think it's really helpful information for the kids to know, and I'd like to see it expanded.”

The second questionnaire item asked, “Does your school have a crisis intervention team to handle students at risk of suicide?” The majority of participants (n=79, 80.6%) reported that their school does have a crisis intervention team to handle students at risk. Some respondents answered written responses to clarify the suicide intervention school protocol and the completion of a risk assessment. A total of 15 school counselors from District A specified their use of the Columbia Suicide Severity Rating Scale (C-SSRS) for students identified as at-risk for suicide. However, three of these counselors noted they do not feel these forms are best suited for elementary-age students.

### **School Counselors' Perceptions of Suicide Prevention**

**Research question two:** What are the perceptions of school counselors regarding the necessity of suicide education programs in elementary school?

The second research question was measured using descriptive statistics from the survey question, “Do you believe it is the role of the school counselor to identify students at risk of

suicide?” Out of 98 responses, 83 school counselors answered, *yes*, 4 responses were *no*, and 11 responded, *unsure*. This finding is notable since 84.7% of the respondents felt it is the role of the school counselor to identify students at risk of suicide, however, only 7% are providing suicide prevention as education in schools.

The next question on the survey that correlates to research question two is, “Has your school offered an in-service to teachers and staff on adolescent suicide in the past five years?” A total of 30 school counselors answered *Yes* to this question. If the school counselor answered *No* or *Unsure*, a follow up question, “How strongly do you feel your school should provide training to teachers and staff on adolescent suicide?” was asked to address the school counselor’s perception of needing suicide training. Table 4.5 shows that more than half of the counselors (66%) agreed there should be suicide training provided to staff.

Table 4.5

*Perception of Staff training on Adolescent Suicide*

	<i>n</i>	%
Need for staff training		
Strongly agree	21	21.4
Agree	24	24.5
Somewhat agree	15	15.3
Neither agree nor disagree	3	3.1
Somewhat disagree	1	1.0
Disagree	4	4.1

## Elementary School Counselors' Self-Efficacy and Suicide Intervention: The King

### Instrument

**Research question three:** What is the level of self-efficacy reported by school counselors regarding managing a crisis event of suicidality, such as a suicide attempt or student who died by suicide, as measured by the King Instrument?

Several questions in this study related to elementary school counselor self-efficacy. As the proxy measure of self-efficacy, prior experience is believed to be associated with increased self-efficacy, the respondents were asked, "Did you receive suicide training in your graduate school program?" As shown in Table 4.6, 59 (60.2%) of school counselors reported they did receive suicide training in graduate school.

Table 4.6

#### *School Counselors Receiving Suicide Training in Graduate School*

	<i>n</i>	<i>%</i>
No/Unsure	39	39.8
Yes	59	60.2

The 59 counselors that answered *yes* for receiving suicide training in graduate school, were asked to answer the following question, "How would you rate the overall effectiveness of the suicide training in your graduate school counseling program?" The results to this question, with 58 responses, are reported in Table 4.7.

Table 4.7

*Overall Effectiveness of Suicide Training*

	<i>n</i>	%
Extremely Effective	16	27.6
Moderately Effective	27	46.6
Slightly Effective	11	19
Neither Effective or Ineffective	4	6.84

Research question three addressed the elementary school counselor's perceived self-efficacy regarding his or her counseling skills in suicide intervention as measured by the King Instrument. The King Instrument presents items that allow respondents an option of selecting from a range of one (strongly disagree) to seven (strongly agree) on each item (King, 1999). This section presents descriptive statistics for the counselor's responses, focusing on both the overall instrument and each of the instrument's self-efficacy dimensions. This section will include tables that provide a detailed description of the descriptive statistics; however, only items that were particularly high or low will be highlighted.

**Efficacy expectations.** The purpose of this subscale was to examine the elementary school counselor's efficacy expectations regarding suicide interventions. Efficacy expectations are the beliefs that an individual has about his/her ability to perform behaviors to produce a specific outcome (Bandura, 1997). There are four items on the efficacy expectations subscale. The reported mean for this subscale is 6.02, indicating that the school counselors rated themselves high when responding to the items on this subscale.



As indicated in Table 4.8, counselors reported they felt the highest level of efficacy with a mean 6.4, when asking a student if he/she is suicidal [item (10): “I believe I can ask a student at risk for attempting suicide if he/she is suicidal.”] The item with the next highest mean (M=6.02) referred to counselors talking with parents about their child at risk of attempting suicide [item (9): “I believe I can talk with parents/guardian(s) of a student to help determine whether or not the student is at risk for attempting suicide.”] Regarding their ability to recognize a student at risk, the counselors reported their lowest mean in this subscale of 5.78 on the efficacy expectations subscale [item (8): “I believe I can recognize a student at risk of attempting suicide”]. Overall, the counselors reported feeling efficacious regarding efficacy expectations with a mean of 6.02.

Table 4.8

*Statistics for Efficacy Expectations Subscale*

	<i>N</i>	<i>M</i>	<i>SD</i>
Self-Efficacy for Efficacy Expectations Subscale	98	6.02	1.02
I believe I can recognize a student at risk of attempting suicide.	97	5.78	1.02
I believe I can talk with parent(s)/guardian(s) of a student to help determine whether or not the student is at risk for attempting suicide.	98	6.02	1.08
I believe I can ask a student at risk for attempting suicide if he/she is suicidal.	98	6.42	0.84
I believe I can effectively offer support to a student at risk for attempting suicide.	98	5.86	1.14

**Outcome expectations.** Outcome expectations are the beliefs that performing a specific behavior will lead to a desired outcome (Bandura, 1997). The purpose of this subscale is to examine the school counselor’s outcome expectations regarding suicide interventions. There are five items on the outcome expectations subscale. The reported mean for this outcomes

expectations subscale is 6.05, indicating that the school counselors rated themselves high for the items on this subscale. As Table 4.9 indicates, counselors reported they felt the highest level of self-efficacy ( $M=6.54$ ) for referring a student at risk for attempting suicide [item (12): “I believe I can refer a student at risk for attempting suicide to a mental health professional.”]. The counselors reported the lowest mean ( $M=5.86$ ) on this subscale regarding their outcome expectations related to their beliefs on the effects that offering support to a student at risk of attempting suicide will reduce the chance that he/she will complete suicide [item (15): “I believe if I effectively offer support to a student at risk of attempting suicide it will reduce the chance that the student will complete suicide”]. Although this item had the lowest reported means in this subscale, overall the counselors were efficacious regarding outcome expectations.

Table 4.9

*Statistics for Outcome Expectations Subscale*

	<i>N</i>	<i>M</i>	<i>SD</i>
Self-efficacy for Outcome Expectations Subscale	98	6.05	.98
I believe I can effectively offer support to a student at risk for attempting suicide.	98	5.86	1.14
I believe I can refer a student at risk for attempting suicide to a mental health professional.	98	6.54	.85
I believe if I recognize a student at risk of attempting suicide it will reduce the chance that the student will complete suicide.	98	5.99	.93
I believe if I talk with the parent(s) of a student to help determine whether or not the student is at risk of attempting suicide it will reduce the chance that the student will complete suicide.	98	5.96	.97
I believe if I effectively offer support to a student at risk of attempting suicide it will reduce the chance that the student will complete suicide.	98	5.90	1.04

**Outcome values.** Outcome values are the values and significance that are placed on the expected outcomes of a specific behavior (Bandura, 1997). The purpose of this subscale is to examine the outcome values of school counselors regarding suicide interventions. There are two items on the outcome values subscale giving the respondent a range of scores from one (strongly disagree) to seven (strongly agree) on each item. The reported mean for this subscale was 6.29, indicating that the school counselors responded agree to the two items on this subscale. As shown in Table 4.10, the results of the analysis for this subscale for the two items were similar. The counselors rated themselves high ( $M=6.43$  and  $M=6.16$ ) on both items indicating that one of the most important things a counselor and a school system could do is prevent students from attempting and completing suicide [item (17): “I believe as a school counselor, one of the most important things I could ever do is to prevent a student at risk of attempting suicide from completing suicide” and item (18): “I believe one of the most important things a school system could do is to establish a program to help recognize and find treatment for suicidal students”]. Therefore, four-fifths (81%) of the school counselors rated themselves high on each of the items in this subscale.

Table 4.10

*Statistics for Outcome Values Subscale*

	<i>N</i>	<i>M</i>	<i>SD</i>
Self-efficacy for outcome values subscale	98	6.29	1.12
I believe as a school counselor, one of the most important things I could ever do is to prevent a student at risk of suicide from completing suicide.	98	6.43	1.07
I believe one of the most important things a school system could do is establish a program to help recognize and find treatment for suicidal students.	98	6.16	1.18

### Overall Instrument

The three subscales (efficacy expectations, outcome expectations, outcome values) were used as dependent variables for this study. As shown in Table 4.11, a total self-efficacy mean score for all 11 subscale items was 6.2 (SD=1.04). A counselor was considered to have high self-efficacy if the total score was 5 or above and low self-efficacy if the score was 4 or below. This was determined based on the seven-point Likert scale; 4 is the midpoint between 1 and 7, therefore a score of 5 is above the mid-point. There was no statistical difference between the three subscales. This sample of elementary counselors rated themselves as efficacious on the total scale, which included all 11 items on counselor self-efficacy for suicide intervention. The counselors were categorized as high or low on each of the subscales by dichotomizing their subscale mean. Overall, the counselors rated themselves high (above 5) on the self-efficacy totals indicating that the counselors, as a group perceived themselves as highly efficacious regarding efficacy expectations, outcome expectations, and outcome values.

Table 4.11

#### *Statistics for Overall Instrument*

	<i>N</i>	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Self-efficacy for efficacy expectations subscale	98	1	7	6.02	1.02
Self-efficacy for outcome expectations subscale	98	1	7	6.05	.98
Self-efficacy for outcome values subscale	98	1	7	6.29	1.12
Total Mean				6.12	1.04

### **Multi-Regression Analysis: Relationship**

*Research Q4:* To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide education in the elementary school?

To address this research question, a multiple linear regression was conducted in order to predict counselor self-efficacy scores from key demographics and other variables as described above. In order to create the most parsimonious model, years of experience as a counselor and years at current position were dichotomized based on the median value, which resulted in cut off values of 10 and 5 years, respectively. Furthermore, multiple iterations of the model were conducted removing predictors unspecified in the research questions.

An analysis was run to examine whether participation in professional development activities and/or in-services, and previous experience with a student expressing suicidal thoughts were predictive of a counselor's self-efficacy for providing suicide education at the elementary school. The initial model tested included all predictor variables (see Table 4.13). This model was not significant, and further evaluation of the original predictors found no significant predictors. It should be noted, that due to the way in which certain questions were asked, not all participants were required to answer all items in the prediction model, thus limiting the overall power and sample size of the model.

Table 4.12

*Initial Regression Model*

	Unstandardized		<i>Beta</i>	<i>P</i>
	$\beta$	<i>SE</i>		
(Constant)	5.65	.34		.00
Suicide Training in Graduate Program	.28	.13	.24	.03
Student Attempt Suicide	.13	.17	.08	.44
Student Express Ideation	.24	.22	.13	.26
In-Service on Suicide	.10	.13	.08	.48
Male (Compared to Female)	.23	.24	.10	.34
Age	.00	.01	.02	.90
Years of Experience	-.06	.15	-.05	.70
Years at Current School	.11	.14	.09	.46
Greater than Masters	.16	.14	.13	.26

*Note.* Model summary:  $F(10, 90) = 1.19, p = .314, R^2 = .020$

In order to create the most parsimonious model, variables that were not included in the research questions were removed: *student having attempted suicide, counselor gender, age, years of experience at current school, and highest level of education.* This regression model is outlined below in Table 4.13.

The overall model predicting self-efficacy was significant,  $F(4, 90) = 1.98, p = .103, R^2 = .081$ . Further examination of the individual predictors indicated that having suicide training in the graduate training program was associated with higher self-efficacy (.249,  $p = .017$ ). None of the remaining predictors were significantly associated with self-efficacy. A summary of the final model is outlined below in Table 4.13.

Table 4.13

*Final Multiple Regression Predicting Counselor Self-Efficacy*

	Unstandardized		Standardized		Tolerance	VIF
	<i>B</i>	<i>SE</i>	<i>Beta</i>	<i>p</i>		
(Constant)	5.745	.198		< .001		
Suicide Training in Graduate Program	.285	.117	.249	.017	.974	1.026
Years of Experience	.013	.117	.011	.911	.985	1.015
In-Service to Teachers and Staff	.093	.126	.076	.462	.975	1.026
Student expressed suicidal thoughts	.267	.179	.152	.140	.975	1.025

*Note.* Model summary:  $F(4, 90) = 1.98, p = .103, R^2 = .081$

**Additional Analyses**

To further examine the relationships between Title I schools and self-efficacy, an independent sample *t*-test was conducted. Results indicated that there was not a significant difference in total self-efficacy scores by whether or not a participant works at a Title I school,  $t(92) = -.15, p = .88$ . Individuals from Title I schools reported similar levels of self-efficacy ( $M = 6.14, SD = .54$ ) compared to those from non-Title I schools ( $M = 6.16, SD = .62$ ).

**Summary**

This chapter outlined the statistical findings from the current study, indicating the significant limitations of suicide education as prevention being implemented in elementary schools, contrary to the review of literature indicating this as a necessity. The results from this

study also indicated that school counselors have high self-efficacy regarding their implementation of suicide intervention. Contributing factors for the high self-efficacy are training in graduate school and years of experience in the field. The following chapter will discuss the practical implications for these findings and suggestions for future research.



## **Chapter V**

### **Discussion**

The purpose of this study was to examine the current suicide education as prevention practices in elementary school, perceptions of elementary school counselors regarding the necessity of these programs, and the self-efficacy of elementary school counselors related to providing suicide prevention and intervention. Additionally, the study examined four variables (years of experience in the field, suicide intervention training in graduate school, participation in professional development activities and/or in-services, and experience with a student expressing suicidal ideation) to see the extent to which these variables were predictive of a school counselor's self-efficacy for providing suicide intervention, specifically related to efficacy expectations, outcome expectations, and outcome values (Bandura, 1977).

Given the current status of school counseling as framed by the American School Counselor Association (ASCA) National Model for School Counseling Programs (2012), professional school counselors are accountable for supporting safe schools and need to demonstrate the effectiveness of their counseling services. Effective July 1, 2017, in the state of Virginia, legislation SB 1117 requires school counselors for initial licensure and renewal licensure to complete training in the recognition of mental health disorder and behavioral distress, including depression, trauma, violence, youth suicide, and substance abuse. Therefore, it is important to explore what is currently being done in schools at all grade levels to provide suicide education as prevention and intervention. Moreover, the literature states that self-efficacy is a major determining factor of effective counseling (Larson & Daniels, 1998), demonstrating the importance of exploring the level of self-efficacy of school counselors related to suicide prevention and intervention. This chapter is divided into five sections to provide an

interpretation of the findings, limitations to the study, recommendations for elementary school counselors, recommendations for counselor educators, and implications for future research. The chapter concludes with the researcher's reflective summary of the results from the study.

### **Interpretation of Findings**

The findings in this study are an initial step toward filling the gap from what we know about the need for providing suicide prevention at the elementary school level and what is actually being done in the elementary school setting. The elementary school counselors' self-efficacy to implement effective programs and interventions to prevent and respond to students at risk of suicide were also examined. As Allen, Burt, Bryan, Carter, Orsi, & Durkan, (2002) suggested, we need to examine if the school counselor's preparation for providing suicide intervention aligns with the demands of the profession.

Results from this study indicated that although elementary school counselors did report a high level of efficacy regarding their overall counseling skills for providing suicide interventions, suicide prevention programs were not being provided to students. Additionally, the results of the analyses found only one variable, suicide training in graduate school, to significantly predict self-efficacy as measured in this study.

The results showing that suicide training in graduate school was a significant predictor of self-efficacy, is important moving forward in the field of counselor education and training. This also raises the question of whether or not elementary school counselors are provided specific training on delivering suicide education as prevention in 4<sup>th</sup> and 5<sup>th</sup> grade classrooms, and if so, does this training also raise their level of self-efficacy in providing this curriculum? Additionally, does this raise the likelihood of advocating to provide this education?

### **Implementation of Suicide Education as Prevention in Elementary School**

The findings from this study show that school counselors in the districts surveyed are not providing suicide education as prevention with elementary school students. This is conflicting evidence since the literature review showed the necessity of providing this education to younger students. According to Riesch et al. (2008), 18% of students as young as grade six had suicidal thoughts, indicating the importance of talking with students in the upper elementary school grades.

Research of literature within this paper has shown that schools should provide a safe learning environment to support the social-emotional well-being of the child, which includes mental health awareness and school counselor training in depression and youth suicide. However, the current study found that only 7% of surveyed schools are following this practice with suicide education as prevention.

### **Perceptions of School Counselors**

The survey results from the participants in this study examined the perceptions of elementary school counselors regarding the necessity of suicide education programs in their schools. Although 84.7% of participants believed it is their role to identify a student at risk of suicide, only 7% of these schools are providing suicide education as prevention with their students. This shows that school counselors do perceive the necessity of providing this type of education for students in upper elementary grades, and raises the initial question of what is causing this lack of education being provided. There are multiple possibilities, one of which may include the lack of time for school counselors to meet with the upper elementary grades to provide specific lessons. Another possibility is that school counselors do not have access to deliver suicide content that is appropriate for this age level, or they may not feel comfortable

with using suicide terminology with this age group. Additionally, would elementary school district administrators support suicide education as prevention in upper elementary grades, and would the parents/guardians also support this information being discussed with their children?

### **School Counselor Self-Efficacy for Providing Suicide Interventions**

The analysis demonstrated that school counselors were efficacious regarding suicide interventions. A majority (83%) of the counselors rated themselves high on the total scale for the King Instrument, which included 11 items on the following self-efficacy subscales: efficacy expectations, outcome expectations, and outcome values. The counselors also rated themselves high on the individual self-efficacy subscales with the subscale mean item response score of 6.2 out of a possible 7. The results indicated that school counselors are effectively using interventions to address students at risk of suicide in elementary schools. However, some counselors did report the suicide assessment scales currently being used are not the most appropriate for elementary level students.

Efficacy expectations are the anticipation that a certain outcome will occur because of specific behaviors (Bandura, 1977). Therefore, the higher efficacy expectations, the more likely school counselors will sustain their efforts through difficult tasks in order to accomplish the desired outcome. In this study, the focus of self-efficacy expectations was in regard to implementing suicide interventions. Participants reported they felt the highest level of efficacy when asking students if they were at risk of suicide. They have expressed expectations that they can talk with school professionals to determine if students' actions put them at risk for suicide, and they can offer support to students at risk for suicide ideation. This is aligned with the importance of training counselor educators, as well as providing professional development to school personnel.

Outcome expectations are one's expectations that certain behaviors will result in a specific outcome (Bandura, 1977). Participants reported they felt the highest level of self-efficacy when being able to offer support to a student at risk of suicide and how it will reduce the chance the student will complete suicide. They were slightly less efficacious regarding their outcome expectations related to talking with a parent or guardian or with the student to reduce the chance the student will complete suicide. These findings demonstrate the importance of school counselors being trained to provide student intervention. School counselors' knowledge of referrals for outside resources involves regular professional development within the county they are working.

Outcome values are the values and significance that are placed on the outcome expectations of a specific behavior (Bandura, 1977). In the case of the current study, the focus of attention was on counseling behaviors related to suicide interventions. Participants indicated that one of the most important responsibilities that both a school counselor and a school system can do is to prevent a student from acting on suicidal behavior. There was a clear report of the school counselors feeling the importance to establish programs that recognize potential suicidal students, and to provide effective prevention/intervention programs.

The skills examined by the King Instrument are important components of counseling training programs and represent the basic counseling skills taught in pre-practicum counseling courses (Larson et al., 1992). Therefore, it was important to examine how confident school counselors are in using those skills. Bodenhorn and Skaggs (2005) state that an individual's confidence that he or she can achieve certain results is a determining factor in how that individual will use certain skills and will result in a positive outcome. The analyses in the current study found that school counselors were efficacious regarding their suicide intervention

counseling skills. This is representative of the overall study's significance of school counselor training as a predictor of self-efficacy and the training that is being provided in graduate school is effective.

### **Factors Predictive of School Counselor's Self-Efficacy for Providing Suicide Intervention**

**Research question four:** To what extent are (a) years of experience in the field, (b) suicide education training in graduate school, (c) participation in professional development activities and/or in services, and (d) previous experience with a student expressing suicidal thoughts predictive of a counselor's self-efficacy for providing suicide education in the elementary school?

The study examined four variables to see if they were predictive of counselor self-efficacy, specifically efficacy expectations, outcome expectations, and outcome values. The results of the regression analysis found that one variable, graduate school training was predictive of self-efficacy. This finding is not consistent with the literature (Bandura, 1977, 1986; Larson et al., 1992) because years of experience is an example of a performance accomplishment which increases self-efficacy. According to Bandura (1977), performance accomplishments are direct personal experiences and have the strongest effect on the development of self-efficacy. Therefore, the more years of experience that a counselor has, the more direct personal experiences the counselor could have with students experiencing suicidal ideation and/or behavior, thus developing an increased level of efficacy expectations and outcome values in that area.

Although 60.2% of the school counselors reported receiving suicide intervention training in graduate school, only 43% felt this training was effective. This is, however consistent with the research because suicide intervention training is an example of vicarious learning. Bandura's

(1986) research discusses how vicarious learning is the second strongest effect on developing one's self-efficacy. This study anticipated that suicide training in graduate school would be a predictive factor of self-efficacy. Since this was a significant predictor of self-efficacy, training being provided to counselor educators does need to be a focus in preparation for future school counselors.

Participation in professional development/training for current counselors and staff was not a significant predictor, and more than half of the counselors reported feeling there should be suicide training provided. It is not surprising this is not significant, because training is not occurring as an in-service or professional training for educators. These findings demonstrate the value of regular and consistent training for educators to maintain high levels of self-efficacy and provide valuable suicide intervention for students. These findings are timely considering Virginia's new legislative law that requires school counselors for initial and renewal licensure to complete training in mental health disorders and behavioral distress, including depression, trauma, violence, youth suicide, and substance abuse (Virginia Legislative System, 2017). Since professional school counselors must renew their professional license regularly, they are now mandated to receive this essential professional development training.

Years of professional experience was not found as a significant predictor for self-efficacy of school counselors in this study. This is surprising and does not align with the literature that counselors increase their level of confidence in their abilities (i.e., self-efficacy) as they develop further counseling experience (e.g., Bodenhorn & Skaggs, 2005; Larson & Daniels, 1998; Lent et al., 1998; Melchert et al., 1996).

According to Bandura (1986), vicarious learning occurs when individuals observe another person managing a situation and can vision how to handle a similar situation on their

own. A common example of vicarious learning is modeling. Larson et al. (1992) states that modeling has a positive effect on self-efficacy; therefore, it was anticipated that years of experience/on the job training would be predictive of school counselor self-efficacy. It is surprising that years of experience was not found significant, because school counselors regularly work as a team, therefore modeling crises situations for one another.

A total of 14 (N=98; 14%) school counselors reported having a student attempt suicide since they worked at their school, and a total of 86 (88%) elementary school counselors reported having a student express suicidal ideation at their school. This data is very high, and higher than expected from the review in literature. It is surprising that the reported school counselor data demonstrates the factor, “experience working with a suicidal student” as not significant for predicting self-efficacy. One possible explanation of the data shown in this study, can be that if a school counselor did work with a student who attempted suicide, the counselor may feel less efficacious compared to school counselors who worked with students who expressed suicidal ideation. Another possible explanation may be related to the school counselor’s lack of professional development, which demonstrates the importance of providing continued professional training for school counselors.

### **Limitations of the Study**

Possible limitations to this study are the represented school districts being specific to the northern Virginia region and feeding into high achieving secondary schools. This study’s sample may not be representative of national elementary school practice. Another possible limitation to this study may be the school counselors’ self-reporting of their level of confidence as being inflated due to limited work with addressing suicide to students inside the classroom. It is possible that if more school counselors were providing suicide education as prevention, they may



feel less self-efficacious without professional development and/or in-service trainings. Additionally, there was a limitation to the process of running a regression in this study. There was relatively small variance in the results on the King Instrument scale, and with more variance, the regression results may be different.

### **Recommendations for Elementary School Counselors**

As qualitative data from this school counselor study shows, providing lessons for upper elementary grades regarding depression and mental health is perceived as effective for students. This sample of elementary school counselors also specified the prevention efforts provided to upper elementary grades regarding bullying prevention. This researcher questions whether these additional details provided indicates that school counselors recognize the link between students who bully or are bullied and depression and/or suicidal ideation. These findings are consistent with the literature that suggests a “sense of belonging” as a risk factor of adolescent suicide (Horton et al., 2016; Moon et al., 2015; and Rigby & Slee, 1999). It is recommended that elementary school counselors continue to advocate for bullying prevention to be a part of continuous elementary education. It is also recommended that school counselors advocate for suicide prevention as education to be a part of continuous education for upper elementary school grades. According to Sutton and Fall (as cited in Baggerly & Osborn, 2006), school counselors show a higher level of self-efficacy when feeling supported by staff. Professional counselors can promote this need by sharing the research showing rising numbers of young children thinking about suicide. Maintaining current data can demonstrate this need for providing quality suicide education with the upper grades in elementary school, therefore showing the need for this training among both school counselors and educational staff.

Given the rise in research regarding suicide among adolescents, it is important for elementary school counselors to communicate with administrators about their need for professional development, as well as an overall school staff need. Elementary school counselors need to receive professional training that includes access to curriculum information specific to children in upper elementary grades. As this training is provided, a recommendation can be for these trained counseling professionals to provide school-wide staff training to provide the skills needed to recognize any warning signs among children in schools. Moreover, elementary school counselors need to communicate with professional agencies and/or school communities that have implemented research-based programs to target specific high-risk groups. Lastly, the topic of suicide education as prevention recommendation may be for counselors and administrators to partner with community-based resources to feel knowledgeable and confident in talking with parents and families about referrals. This can also lead to other avenues of communication with parents and families.

### **Recommendations for School Administrators**

The current research study shows the need for school counselors to provide suicide prevention at the elementary level. There is sufficient research supporting suicide education in middle and high schools, therefore school administrators need to become more aware and knowledgeable of the prospective curriculum that can be provided to elementary students. It is recommended that school administrators consult and collaborate with school counselors to review student data regarding those who have attempted suicide and have expressed suicidal ideation. Additionally, school administrators need to recognize the importance of sharing this research with the parent community in order to gain support for providing this education to students in the upper elementary grades.

The data from this study shows suicide training as professional development/in-service is not being provided to school counselors and staff. A recommendation is for school administrators to help advocate for this specific training to be provided and demonstrate support for all school staff to become more knowledgeable and confident in assisting students at risk.

### **Recommendations for Counselor Educators**

The results from this study do show significance in providing suicide training for school counselors in graduate school, thus aligning with the ASCA's national model. It is recommended that this training remain a focus for counselor educators, and an added component for training to include implementation of suicide education as prevention for elementary school counselors. The research within this paper demonstrates this education is being provided in middle and high schools, however it is not being introduced to upper elementary school grades. School counselors have reported feeling there is importance for this specific education to be provided. Consideration for providing this type of training may need future research with educators to understand the possible resistance of providing suicide education as prevention to elementary school students.

### **Implications for Future Research**

There are several implications for future research based on the current study. One such implication is to use a larger sample. This will allow more potential significance when participants skip questions based on previous answers. Another implication for future research would be to explore suicide prevention and self-efficacy using the adapted King Instrument with elementary school counselors. Future research could expand the adapted King Instrument to explore counselor self-efficacy in more specific areas, such as the counselor's role at his/her current school as well as any barriers that impede the counselor from implementing suicide

prevention. Additionally, expanding the King instrument could serve as a needs assessment to explore the issues that are specific to that particular building, such as the need for suicide prevention programs, school counselor role, and school climate. Future researchers may want to consider using a focus group to explore some of these areas. Furthermore, school counselors reported the suicide assessment scales currently being used are not the most appropriate use with elementary level students. Researchers need to investigate more appropriate suicide assessment resources for this age group. Furthermore, in this study, 20 elementary school counselors reported they do not have a crisis intervention team in place. Researchers may want to further investigate whether there is a crisis intervention team in place at all schools that school counselors may not be aware of and need specific training.

In the future, researchers may want to examine the specific training provided to school counselors given the new legislation SB 1117 in the state of Virginia. It is possible that a mandated mental health curriculum for upper elementary school grades be imposed to include information about suicide.

The current study did not find participation in professional development activities and/or in-services or experience working with a suicidal student as predictive of self-efficacy. Future researchers may want to identify additional variables that predict school counselor self-efficacy regarding suicide intervention.

The current study found one variable (suicide training in graduate school) predictive of self-efficacy. Future researchers can look at other possible predictor variables for the three components of self-efficacy in order to increase counselor performance. Sutton and Fall (1995) found that the self-efficacy of school counselors was influenced by school climate. Other

variables that have been studied in the literature that have an effect on self-efficacy include anxiety, amount of clinical supervision, and beliefs about performance (Larson et al., 1992).

Additionally, researchers may want to further explore the rationale for not providing suicide prevention in schools. Counselor educators may want to explore other variables that are predictive of self-efficacy. Examining these variables will provide counselor educators with important information to assist them in planning and restructuring curricular experiences that will enhance school counselor self-efficacy through professional development training

### **Summary**

Students at risk of suicide and completing suicide are a reality among schools across the world. Research suggests that 15 to 20% of students under the age of 12 will experience suicidal ideation and/or be at risk of suicide (Vander Stoep et al., 2009). As the literature shows, students experiencing suicidal ideation are impacted emotionally, socially, personally, and academically (Erickson & Abel, 2013; Riesch et al., 2008; Rigbee & Slee, 1999; and Robinson et al., 2012). Creating a positive and safe environment for children to learn should be a top priority of school systems across the world. School counselors play an essential role in addressing this problem; therefore, it is imperative that they are confident regarding counseling skills related to suicide interventions.

Counseling self-efficacy is a major determinant of effective counseling (Larson & Daniels, 1998) as well as one of the predictors of effective counseling in counselor trainees (Sharpley & Ridgeway, 1990). Therefore, counselor educators should provide opportunities to increase counselor self-efficacy for counselor trainees as well as school districts providing opportunities to increase self-efficacy for practicing professional counselors in the area of suicide intervention and prevention. The results of this study showed that counselors are receiving

suicide intervention training before becoming professional school counselors and this was found to significantly predict the school counselor's self-efficacy. However, this study also shows that professional development/in-service training was not found to significantly predict the school counselor's self-efficacy. This is an area that needs to be explored further so that school professionals can provide and enhance training programs in the districts. Since school counselors are learning the skills needed to be efficacious for providing intervention for at-risk students, program curriculum provided to counselors in training can be examined further. This can help determine the relevance for continuing to provide this training regularly as professional development in districts, as well as expanded and enhanced to train school counselors specifically on providing suicide prevention for children in the upper elementary grades.

For the current study, the researcher was unable to find an instrument to measure elementary school counselor's self-efficacy related to suicide interventions, indicating that this is an area that needs to be explored further. The development of the adapted King instrument will allow for further exploration in the area of school counselor self-efficacy as it relates to suicide interventions in the elementary school setting.

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**Appendix A**

**King Instrument (adapted for elementary school counselors)**

1. Do you believe it is the role of the school counselors to identify students at risk for suicide?  
Yes, no, unsure
  
2. Does your school have a crisis intervention team to handle students at risk of suicide?  
Yes, No, unsure
  
3. Does your school include teaching about suicide prevention in its curriculum?  
Yes, No, unsure
  - a) If *No*, how strongly do you feel that your school should provide suicide education to your students?  
1      2      3      4      5      6      7
  - b) If *Yes*, what are some details about your school’s suicide education program and what are the grade levels involved?  

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  - c) If you answered *Yes*, how would you rate the overall effectiveness of the suicide education program at your school?  
1      2      3      4      5      6      7
  
4. Has your school offered an in-service to teachers and staff on adolescent suicide in the past 5 years?  
Yes, No, unsure
  - a) If you answered *No*, how strongly do you feel that your school should provide training to teachers and staff on adolescent suicide?  
1      2      3      4      5      6      7
  - b) If you answered *Yes*, what did you learn from your in-service training on adolescent suicide?  

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  - c) If you answered *Yes*, how would you rate the overall effectiveness of the suicide training?  
1      2      3      4      5      6      7
  
5. Did you receive suicide training in your graduate school program?  
Yes, No
  - a) If no, how strongly do you feel that your graduate school program needs to provide this training to school counselors in training?  
1      2      3      4      5      6      7
  - b) If yes, how would you rate the overall effectiveness of the suicide training?  
1      2      3      4      5      6      7





14. I believe if I ask a student at risk for attempting suicide if he/she is suicidal it will reduce the chance that the student will complete suicide. (outcome expectations)

<b>Strongly</b>							<b>Strongly</b>
<b>Disagree</b>							<b>Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		<b>7</b>

15. I believe if I effectively offer support of a student at risk of attempting suicide it will reduce the chance that the student will complete suicide. (outcome expectations)

<b>Strongly</b>							<b>Strongly</b>
<b>Disagree</b>							<b>Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		<b>7</b>

16. I believe that if I refer a student at risk of attempting suicide to a mental health provider it will reduce the chance that the student will complete suicide. (outcome expectations)

<b>Strongly</b>							<b>Strongly</b>
<b>Disagree</b>							<b>Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		<b>7</b>

17. I believe as a school counselor, one of the most important things I could ever do is to prevent a suicidal student from complete suicide. (outcome values)

<b>Strongly</b>							<b>Strongly</b>
<b>Disagree</b>							<b>Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		<b>7</b>

18. I believe one of the most important things a school system could do is to establish a program to help recognize and find treatment for suicidal students. (outcome values)

<b>Strongly</b>							<b>Strongly</b>
<b>Disagree</b>							<b>Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>		<b>7</b>

**Appendix B****Demographic Information**

Please indicate your gender:

- Male       Female       Prefer not to answer

Please indicate your age:

Please indicate your total number of years in the school counseling profession:

Please indicate the total number of years you have been a counselor at your current elementary school:

Which categories best describe you? Select the boxes that apply. Note: you may select more than one group (as specified by the new Census Bureau).

- White  
 Hispanic, Latino or Spanish  
 Black or African American  
 Asian  
 American Indian or Alaska Native  
 Middle Eastern or North African  
 Native Hawaiian or other Pacific Islander  
 Other Race, Ethnicity, or Origin

Please indicate your highest level of education.

- Master's       Master's Plus       Doctorate

Please indicate the grade level of children with whom you work as a school counselor. Check all that apply:

- Pre-K through 2<sup>nd</sup> grade  
 Kindergarten through 2<sup>nd</sup> grade  
 3<sup>rd</sup> grade  
 4<sup>th</sup> grade  
 5<sup>th</sup> grade  
 6<sup>th</sup> grade

Is the geographic location of your school?

- Urban       Suburban       Rural

Is your school a Title I school?

- Yes       No       Unsure

## Appendix C

### Email to Request Permission to use the King Instrument



Kristin Devaney <krisd12@vt.edu>

May 27 ☆



to keith.king ▾

Hello, Dr. King,

I am a doctoral student from Virginia Polytechnic Institute and State University, and I am writing my dissertation tentatively titled, "Exploring the needs of suicide education with elementary school counselors," under the direction of my dissertation committee chaired by Dr. Nancy Bodenhorn.

I kindly request permission to use the King Instrument with my research study published in your article:

King, K., Price, J., Telljohann, S., & Wahl, J. (1999). How confident do high school counselors feel in recognizing students at risk for suicide? *American Journal of Health Behavior*, 23(6), 457-467.

I would like to modify the instrument's questions to be specifically geared toward professional elementary school counselors for my dissertation study.

If granted permission, I will use the King Instrument under the following conditions:

- I will only use this instrument for my research study and I will not sell or use it with any compensation or curriculum development activities.
- I will include the copyright statement on all copies of the instrument.
- I will send my research study and survey data promptly to your attention.

If these are acceptable terms and conditions and/or if you need further information, please contact me at [krisd12@vt.edu](mailto:krisd12@vt.edu), or via mail at the address below. Thank you for your time.

Sincerely,  
Kristin Devaney, MSEd  
Doctoral Candidate  
11 S Montague Street  
Arlington, VA 22204  
[\(202\) 549-4200](tel:(202)549-4200)

---

## Appendix D

### Obtained Permission to Use the King Instrument



**King, Keith (kingkt)** <kingkt@ucmail.uc.edu>

to me ▾

Rectangular Snip

Jun 6 ☆

Hi Kristin,

Thanks for the message.

I am glad that my article on suicide prevention has been of help for you in your research.

I grant you permission to use my instrument, the King Instrument, under the conditions you have listed below.

I wish you all the best with your dissertation.

Best wishes,

Dr. King

---

## Appendix E

### Invitation to Participate to Panel of Experts

Dear School Counselor Colleagues,

I am seeking your input as a member of a “panel of experts” to review and respond to an online questionnaire that I anticipate using for data collection in my doctoral research study. For the actual study, the online instrument will be sent to elementary school counselors. This is an important process in validating the proposed instrument and providing me with an opportunity to review my data analysis procedures.

I kindly request that you complete the entire questionnaire to the best of your ability. It is anticipated that the survey questionnaire will take about ten minutes to complete. After completion, please send me an email at [krisd12@vt.edu](mailto:krisd12@vt.edu) to let me know if there are any recommended edits and/or corrections that need to be made and if there is anything that can be done to improve the instrument.

Thank you in advance,

Kristin Devaney, MEd  
Professional School Counselor  
Doctoral Candidate, Virginia Tech

Dr. Nancy Bodenhorn  
Doctoral Dissertation Chair  
Counselor Education Program  
Virginia Tech

## Appendix F

### Informed Consent for Participants

Virginia Polytechnic Institute and State University

Research Project: Examining the Needs of Suicide Prevention and Intervention in Elementary Schools: An Exploratory Study with Elementary School Counselors

Dear School Counseling Colleague,

My name is Kristin Devaney, and I am a doctoral candidate at Virginia Tech. As part of my doctoral dissertation requirements, I am conducting a study with school counselors to explore the need for suicide prevention and intervention at the elementary school level. Participation in this study is completely voluntary, and your identity will remain anonymous. If you choose to participate, you have the right to refuse to answer any question(s) and/or withdraw your responses at any time. The on-line instrument takes about 10 minutes to complete and there is no cost, compensation, or limited anticipated risk in participating. If you find yourself discomforted by the topic and questions regarding adolescent suicide please talk with a mentor, colleague, or counselor about this discomfort. However, your responses are critical in understanding the need for school counselors to provide suicide education at the elementary school level.

If you have questions regarding this study, or if you would like a summary of the results, please contact me at [krisd12@vt.edu](mailto:krisd12@vt.edu).

If you agree to participate, please go on to the next page. Moving forward with the survey implies your consent.

Thank you in advance for your participation.

Sincerely,

Kristin Devaney, MEd  
Doctoral Candidate  
Virginia Tech

Dr. Nancy Bodenhorn  
Doctoral Dissertation Chair  
Virginia Tech

## Appendix G

## Approval letter from Arlington County Public Schools



Arlington  
Public  
Schools

INFORMATION SERVICES  
Office of Planning & Evaluation  
1426 N. Quincy Street, Arlington, VA 22207  
703.228.6025 FAX 703.525.7512 <http://www.apsva.us>

July 17, 2017

Kristin Devaney  
11 S Montague Street  
Arlington, VA 22204

Dear Ms. Devaney:

Our research committee has completed its review of your application to conduct the research study entitled, "*Examining the Needs of Suicide Prevention and Intervention in Elementary Schools: An Exploratory Study with Elementary School Counselors*," in Arlington Public Schools (APS). The committee has approved your research contingent on the following requirements:

1. The participation of any APS staff member who might be involved is completely voluntary at all times. Each participant must be informed in writing of the scope and potential impact of their participation. You should be prepared to provide proof of their informed consent, if requested.
2. You must maintain the total anonymity of all students, staff, and schools associated with APS in any discussions or reports. Any disclosure that may reveal the participation of an APS student, staff member, school, or the school system must be approved in advance by the APS Office of Planning and Evaluation.
3. Any change to the proposed research must be submitted to and approved by the APS Office of Planning and Evaluation in advance of implementation.

Your research has been assigned **project number 2018-001**. Please refer to this number in any future correspondence with this office. We wish you success as you carry out this study.

Sincerely,

Regina Van Horne  
Assistant Director for Evaluation



## Appendix H

## Approval Letter from Prince William County Public Schools



Prince William County  
PUBLIC SCHOOLS  
*Providing A World-Class Education*

June 21, 2017

Kristin Devaney  
11 S Montague Street  
Arlington, VA 22204

Dear Ms. Devaney,

The purpose of this letter is to let you know that your request to conduct doctoral level research in Prince William County Public Schools (PWCS) titled, *Examining the Needs of Suicide Education in Elementary Schools: An Exploratory Study with Elementary School Counselors*, has been reviewed by PWCS leadership. I am pleased to inform you that your project has been approved. You may contact elementary school counselors, inviting them to participate in the study. In your initial contact with potential participants, please inform them that the project has been approved by PWCS. Please finish all data collection no later than August 15, 2017.

Participation is voluntary and informed consent must be sought in all cases. PWCS requests a copy of the findings from the research when it is complete.

We wish you success with your study.

Sincerely,

A handwritten signature in cursive script, appearing to read "Michael T. Neall".

Michael T. Neall, Ph.D.  
Supervisor of Program Evaluation

DR. MICHAEL T. NEALL  
*Supervisor of Program Evaluation*

## Appendix I

### Invitation to Participate

August, 2017

Dear School Counseling Colleague,

My name is Kristin Devaney, and I am a Professional School Counselor with Arlington Public Schools, as well as a doctoral candidate at Virginia Tech. As part of my doctoral dissertation requirements, I am conducting an exploratory study investigating the *need for suicide prevention and intervention as education* that is currently in place at the elementary school level. I am kindly requesting your participation in this study because you are an elementary school counselor with XXXXX County. Participation is strictly voluntary and there will not be any compensation. However, your responses will help professionals become knowledgeable of the current suicide education programs in place at the elementary school level, and understand the perception and belief of school counselors' on whether there is a need for this education with young children.

This online questionnaire will take approximately 10 minutes complete. Specific information about yourself will be asked, however, your name does not need to be provided. This data will be anonymous and located on a secure server.

Agreeing to participation in this study is granting the researcher permission to use your responses for research purposes only. You can access the questionnaire at the following secure web address:

(Qualtrics link will be added when live)

If you would prefer a paper and pencil version, please reply to this email and provide your mailing address. If you have questions regarding the study, or if you would like a summary of the results when completed, please feel free to contact me at [krisd12@vt.edu](mailto:krisd12@vt.edu).

Thank you in advance for your participation.

Kristin Devaney, MEd  
Professional School Counselor  
Doctoral Candidate, Virginia Tech

Dr. Nancy Bodenhorn  
Doctoral Dissertation Chair  
Counselor Education Program  
Virginia Tech