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Secondary Teachers' Perceived Role in Suicide Prevention and Intervening with Suicidal Students

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ABSTRACT

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Best practices in adolescent suicide prevention include teachers as major participants, because teachers are in a unique and frontline position to support students. Unfortunately, many teachers are unaware of their role in suicide prevention efforts. In addition to confusion about their roles, teachers may feel uncomfortable and/or lack confidence in their abilities to identify warning signs and intervene with suicidal students. This study assessed secondary teachers' ($N = 74$) perceptions of their role in suicide prevention as well as how they perceive their comfort and confidence levels in identifying and intervening with suicidal students. In addition, this study explored possible reasons teachers might feel uncomfortable assisting in suicide prevention. While teachers overwhelmingly agreed that they should have a role in adolescent suicide prevention, teachers also reported having limited confidence in their ability to identify or help potentially suicidal youth. Teachers also acknowledged limited training, fear of making the situation worse, and fear of legal repercussions as potential barriers to participating in suicide prevention efforts. Consequently, teachers will benefit from more direct training which clearly identifies their roles and allows opportunities for teachers to role play.

Keywords: adolescent suicide, school-based suicide prevention, teacher perceptions, role, training, barriers

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DESCRIPTION OF THESIS STRUCTURE

This thesis, *Secondary Teachers' Perceived Role in Suicide Prevention and Intervening with Suicidal Students*, is presented in a dual or hybrid format. In this hybrid format, both traditional and journal publication formatting requirements are met.

The preliminary pages of the thesis adhere to university requirements for thesis formatting and submission. The first full section is presented in the new journal-ready format and conforms to the style requirements for future publication in education journals. The full literature review is included in Appendix A. Two reference lists are included in this thesis format. The first includes only the references found in the first journal-ready article. The second reference list includes all citations from the full literature review found in Appendix A.

Introduction

Throughout its long and intense history, the topic of suicide has been romanticized, vilified, stigmatized, and publicized. Artists in all ages have used accounts of suicide to shock the public and express their own internal anguish (e.g., Shakespeare's *Romeo and Juliet*; 1970's television comedy/drama MASH theme song, *Suicide is Painless;* 1998 rock song *Jumper* by Third Eye Blind). One heartbreaking song released in 2000, was not only inspired by the suicide note of a young man, but in some ways served as the suicide note of another (Associated Press, 2000; Hoppus, 2000). While *Adam's Song* was written by Blink-182 lead singer Mark Hoppus as a message of hope, some misinterpreted the lyrics to encourage suicide (Hoppus, DeLonge, & Norris, 2000). This song was both lauded and criticized, and after a young man in Littleton, Colorado took his own life with *Adam's Song* set to play on repeat, the song sat at the center of public controversy (Associated Press, 2000).

While adolescent suicide is not taken lightly, the motivation, risk factors, and warning signs are often missed and misunderstood (Berman, Jobes, & Silverman, 2006; Pires, 2011). Moreover, strategies to prevent adolescent suicide are little known in the places where they could have the greatest effect (Berman et al., 2006; Freedenthal & Breslin, 2010). In 2012 the U.S. Department of Health and Human Services Office of the Surgeon General and the National Action Alliance for Suicide Prevention published a National Strategy for Suicide Prevention. This program includes a number of recommendations for improving suicide prevention in the United States, including Objective 5.2 which states, "Encourage community-based settings to implement effective programs and provide education that promote wellness and prevent suicide and related behaviors" (U.S. Department of Health and Human Services Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012, p. 42). This includes schools,

youth-serving organizations, faith-based organizations, and other settings where adolescents frequently spend time (U.S. Department of Health and Human Services Office of the Surgeon General & National Action Alliance for Suicide Prevention, 2012). Although schools received a relatively small mention in the 2012 National Strategy for Suicide Prevention, educators have the potential to play a large part in the prevention of adolescent suicide (American Foundation for Suicide Prevention [AFSP] & Suicide Prevention Resource Center [SPRC], 2011). Unfortunately many educators are unsure of their role in suicide prevention (Westefeld, Kettman, Lovmo, & Hey, 2007).

In her 2011 dissertation study, Konopinski surveyed middle and high school teachers from a suburban school district. Although the school district did have a policy regarding potentially suicidal students, survey results indicated 63% of the teachers were unaware of the policy. While studies examining teachers' knowledge of suicide facts demonstrate teachers often correctly answer questions involving relevant clinical factors such as warning signs and risk factors, teachers are not as familiar with prevention and intervention strategies (Konopinski, 2011; Pires, 2011; Westefeld et al., 2007; Williamson, 2010).

In one study, teachers were asked how they responded when a student appeared suicidal. Of the 122 participants who responded, almost half reported they did nothing (Westefeld et al., 2007). Though this study did not address teachers' reasons for not responding, it is possible the teachers did not take action because they were uncomfortable or lacked the knowledge and confidence necessary to respond.

The literature on adolescent suicide prevention has not specifically addressed teachers' perceptions regarding their role in school-based suicide prevention. As teachers have become increasingly responsible for the emotional welfare of their students, some teachers have strongly

resisted this trend (Alisic, Bus, Dulack, Pennings, & Splinter, 2012). In one qualitative study, teachers were asked to define their roles in situations where students had been exposed to a major emotional trauma. One teacher suggested that teachers should be responsible for teaching academics only and that teaching social and emotional skills should fall on school psychologists and social workers. Some teachers suggested that although they would like to help students struggling after a trauma, they just did not have the time or resources to attend to an individual student's emotional needs and the whole class at the same time (Alisic et al., 2012).

Similar to teachers' perceptions of working with students after an emotional trauma (Alisic et al., 2012), teachers may also demonstrate resistance to participating in school-wide suicide prevention efforts. Understanding teachers' perceptions and potential barriers to participating in suicide prevention are important considerations in developing and strengthening school-based suicide prevention programs.

Purpose of Study

Efforts to better understand teacher roles in suicide prevention have primarily focused on identifying what teachers know about suicide and suicide prevention (Konopinski, 2011; Williamson, 2010). While many teachers believe suicide is a relevant and critical problem among adolescent students (Westefeld et al., 2007), teachers have difficulty identifying and responding to suicidal students (King, Price, Telljohan & Wahl, 1999; MacDonald, 2004; Nadeem et al., 2011; Scouller & Smith, 2002).

One way to conceptualize the significance of the problem is to consider the number of students in a classroom who think about or attempt suicide. By using the most recent statistics from the Centers for Disease Control and Prevention's (CDC)Youth Risk Behavior Surveillance System (YRBSS), one can estimate in a high school classroom of 30 students, over the past 12

months, five students seriously considered attempting suicide, four made a plan to complete suicide, and two students attempted suicide (CDC, 2011).

Although teachers interact with suicidal students on a daily basis, they may be unaware of students' suicidal thoughts and intentions. In situations where teachers are aware, they are often unsure about how to render assistance (Freedenthal & Breslin, 2010; Konopinski, 2011; Nadeem et al., 2011). For teachers to effectively intervene with suicidal students, in addition to understanding and identifying suicide risk factors, teachers need to know what they can actually do to help—and most importantly teachers need to feel comfortable and confident in applying their knowledge (Berman et al., 2006; Johnson & Parsons, 2012).

The purpose of the current study was to gain insights into teachers' perceptions of their roles in suicide prevention, their perceived level of comfort and confidence in identifying and intervening with suicidal students, and barriers to teachers' participation in suicide prevention efforts. A survey was developed to investigate teachers' perceptions regarding these specific underlying aspects of suicide prevention and intervention.

Research Questions

In regard to junior high and high school teachers' perspectives regarding their involvement in adolescent suicide prevention, this study focused on the following research questions:

1. What are teachers' perceived roles in preventing youth suicide?
2. What are teachers' perceptions of their personal comfort and confidence in recognizing and identifying potentially suicidal students?
3. What are teachers' perceptions of their personal comfort and confidence in intervening with potentially suicidal students?

4. What are the reasons as to why teachers might be uncomfortable identifying and/or intervening with suicidal students?

Method

This study employed survey research methods to elicit responses from each of the participating teachers. Survey research is designed to obtain greater insight into participants' perceptions of the world in which they live (Krosnick, 1999). The development of the final survey for this study was based on an initial pilot survey. The pilot survey assisted the researchers in gauging participants' understanding of the survey questions and identified common themes in teachers' perceptions of their roles in suicide prevention.

Development and Description of Pilot Survey

The pilot survey was administered to teachers from a diverse suburban school district in the western United States. Fifty percent of the schools in this district are Title One schools, indicating about half of the schools serve 40% or more students with free or reduced pricing for school lunches. Regarding linguistic diversity, approximately 45 languages are spoken by students attending this district. Student ethnicity is primarily White (85%), with Latino being the largest minority ethnic group (approximately 13%).

In early 2013, teachers from this district were encouraged to participate in one of a series of suicide prevention trainings. After receiving district approval and Brigham Young University's Institutional Review Board (IRB), an email invitation to participate was sent to every teacher who was registered for the district-wide suicide prevention trainings (131 teachers). The email briefly described the study and included an Internet link to the survey. Participants were asked to complete the online survey prior to attending their scheduled training. Teachers were also given the option of completing and turning in a paper and pencil version of

the survey prior to the training. Teachers were asked not to complete a paper and pencil survey if they had previously completed the online version. To encourage participation, teachers were told that results from the survey would be used to inform content of the upcoming training sessions.

The pilot survey was completed by 122 individuals of the 131 teachers attending the training (93% participation rate), although three of the participants were not classroom teachers. Therefore, data from 119 participants were included in the pilot study. Participants were asked to answer questions in five different areas; demographics (e.g., age, years teaching), suicide prevention training experience, perceptions of teacher roles in suicide prevention, experience with suicidal students, and barriers to identifying and intervening with suicidal students.

Of the teachers participating in the pilot study, 84.7% were female. The average number of years teaching was 12.98 years. With regard to highest degree earned, approximately 34% of the participants held a master's degree; 62% held a bachelor's degree; and 6% were undeclared. The majority of the participants (80.3%) were general education teachers, while 17.9% taught in the special education setting, and 1.7% taught in both general and special education classrooms. The pilot survey was completed predominantly by elementary school teachers (64.1%) and secondary school teachers (25.6%). Additional participants (n = 12, 10.3%) were invited to attend, though employed in the district's alternative schools, preschools, and other community educational settings.

To obtain greater insights into teachers' perceptions, the pilot survey included both open-ended questions and questions with a selected set of response options. Quantitative questions were typically followed by open-ended questions, allowing participants to further explain their quantitative responses. For example, teachers were asked the following question: "Do you

agree/disagree that teachers should have a role in suicide prevention?" Participants were offered a five-point Likert response scale ranging from 1 – *Strongly disagree* to 5 – *Strongly agree*. After selecting a response to this question teachers were asked, "Please explain your reasons for agreeing/disagreeing that teachers should have a role in suicide prevention." This allowed participants to express why they felt teachers should or should not have a role in suicide prevention.

The final four quantitative questions measured teachers' perceived *comfort* and *confidence* in identifying and intervening with suicidal students. Comfort and confidence were considered important perceptions underlying how and if teachers would actually follow through with an intervention, such as engaging in conversations with potentially suicidal students. In previous research studies, which focused on sensitive topics such as suicide, participants were asked questions about both comfort and confidence, because an individual may have confidence in their knowledge and skills to address sensitive topics, but may not feel comfortable in doing so (Deutschlander, 2010; Jones et al., 2007).

The final four quantitative questions regarding teachers' perceived *comfort* and *confidence* were presented in statement form, allowing participants to agree or disagree using a Likert-type scale with anchored points ranging from *Disagree very strongly* (1) to Agree v*ery strongly* (7). The following statements were included:

- I am **comfortable identifying** suicidal students;
- I am **confident identifying** suicidal students;
- I am **comfortable helping** a student who has confessed to being suicidal; and
- I am **confident helping** a student who has confessed to being suicidal.

The final questions included on the pilot survey were open-ended questions allowing participants to explain why a teacher might feel uncomfortable or lack confidence when "identifying" or "helping" suicidal students.

Open-ended questions in the pilot survey provided an option for teachers to more fully explain their perceptions of teachers' roles in youth suicide prevention. Teachers' responses to open-ended questions were coded for themes and frequency by using the steps of thematic analysis outlined by Braun and Clark (2006). These steps included becoming familiar with the text by extensive review, generating initial codes by identifying themes and patterns, identifying broad themes within the data, and reviewing the themes previously identified to determine relevance. After reviewing the identified themes each theme was named, defined, and summarized (Braun & Clark, 2006). Responses to the open-ended pilot survey questions influenced the development of the final survey's questions and response options.

Final Survey's Recruitment and Description of Participants

As a result of this district's interest in training teachers for suicide prevention and the district's willingness to participate in the study, the final survey was administered in the same school district as the pilot survey. The associate superintendent of the participating school district accepted the invitation to include his secondary teachers in the study. He asked the secretary over student services to send an email inviting the district's 278 secondary teachers (grades 7–12) to complete the survey. The email contained a link to the online Qualtrics survey. Of the 278 secondary teachers who received the invitation to participate, 113 teachers completed the survey (40.6% participation rate). Thirty-nine of the completed surveys were eliminated from the data analyses because those teachers had not taught adolescents for a minimum of one year. To participate in the study, teachers were required to have taught adolescent students

(grades 7-12) for a minimum of one year. The final number of survey participants was 74. Table 1 summarizes the number and percentage of teachers working with each of the secondary grade levels (grades 7–12). Most teachers taught more than one grade level.

All participating teachers worked with students from 7th to 12th grade at the time of the survey or had taught students in that age group for one year or more. Similar to the pilot survey, a majority of the participants taught in general education classrooms (81%). The average participant age was 44.2 years, and 70.2% of the participants were female. Fifty percent of the participants' highest degree was a bachelor's degree, while 43.2% held master's degrees. Participating teachers completed their highest degrees from 1971 to 2013, with the median year being 2004. The number of years participants reported teaching adolescents ranged from 1 to 41 years, $M = 13.96$ years, $SD = 10.63$ years. The median number of years teachers reported teaching was 12 years.

Table 1

Percent of Teachers by Grade Level ($N = 74$)

Grade	Teachers (*n*)	Percent of total sample
7	25	33.78
8	28	37.84
9	33	34.59
10	33	34.59
11	34	45.95
12	34	45.95

Note. Teachers taught multiple grade levels; therefore, the cumulative sum and percentages exceed 74 and 100%, respectively.

Development and Description of Final Survey

The primary researcher, with the assistance of her faculty advisor and two school psychology graduate students, developed the final survey. Prior to distributing the final survey, Brigham Young University's IRB formally approved the proposed research, including the survey. Questions on the survey included basic demographic information as well as questions that specifically addressed the study's research questions. To keep the survey completion time to five minutes or less, open-ended questions were not included on the final survey. Teachers were asked to check response options that applied to their perceptions of and experiences with suicide prevention. Teachers took approximately five minutes to complete the survey.

The first part of the survey included questions regarding basic demographic information. These questions asked the participant to provide their age; gender; highest completed degree; year when highest degree was completed; type of classes taught (general education or special education); number of years spent teaching; number of years teaching students in grades 7–12; and current grade levels taught.

Two basic questions were asked to determine if and when teachers received training for suicide prevention: (a) "During your teacher training (college or graduate school) did any of your classes or learning activities address suicide prevention in schools?" and (b) "As a teacher have you received suicide prevention training in the last five years?" Response options for each of these two questions included *yes*, *no*, and *don't remember*.

All questions beginning with the phrase, "Do you AGREE/DISAGREE with the following statement," included response options defined by Likert scale anchors ranging from *Disagree very strongly* (1) to Agree v*ery strongly* (7). The following four questions were posed

to gather information regarding the participants' perceptions of their role and responsibility in youth suicide prevention and to determine their current involvement (role) in suicide prevention.

- Do you AGREE/DISAGREE with the following statement: Teachers should have a role in suicide prevention?
- Do you AGREE/DISAGREE with the following statement: Teacher's major focus should be on academics?
- Do you AGREE/DISAGREE with the following statement: Teachers have a responsibility to help their students emotionally?
- As a teacher do you AGREE/DISAGREE that you *currently* have a role in suicide prevention?

Teachers were also asked the following question, "As a teacher, which of the following things do you currently do (check all that apply)?" Four response options were offered to participants, based on common responses to a similar question on the pilot survey. These response options included the following: (a) *Listen for warning signs of suicide in student conversation*, (b) *Inform students of your availability to talk about suicide and other personal issues*, (c) *Step in when students are bullied*, and (d) *Act as a member of the school crisis management team*.

Teachers were also asked two questions about their experience with suicidal students. Teachers were asked if a student had ever shared their suicidal intentions and if a student ever told them of a peer's suicidal intentions. Response options for these two questions were either *yes* or *no*.

The remaining seven questions offered participants seven response options based on the Likert scale anchors. Response options ranged from *Disagree very strongly* (1) to Agree v*ery*

strongly (7). The first four of these questions were intended to collect information regarding participants' comfort and confidence in identifying a suicidal student and in helping a suicidal student. These questions were directly and simply stated:

- I would be *comfortable identifying* a potentially suicidal student.
- I would be *confident identifying* a potentially suicidal student.
- I would be *comfortable helping* a potentially suicidal student.
- I would be *confident helping* a potentially suicidal student.

The final three survey items (statements) were based on three commonly reported barriers to helping and identifying suicidal students. Teachers who completed the pilot survey most frequently reported these barriers. Again, participating teachers indicated their response by selecting an anchor point on the Likert scale, ranging from *Disagree very strongly* (1) to Agree v*ery strongly* (7). The three survey items are listed below:

- Teachers may be uncomfortable helping and identifying suicidal students because they lack the appropriate training.
- Teachers may be uncomfortable helping suicidal students for fear of making the situation worse.
- Teachers may be uncomfortable identifying and helping suicidal students because they fear legal repercussion.

Data Analyses

Continuous variables (including Likert scales) were summarized with descriptive statistics (means, standard deviations, and ranges). To better describe the distribution of Likert scale responses, data were also reported based on the categorical options linked to the Likert scale anchors. Additionally, correlation coefficients were used to determine the degree of

relationship between identified continuous variables and teachers' reported levels of confidence and comfort. This information provided insight into the relationship between teachers' reported levels of confidence and comfort related to identifying and helping suicidal students.

Additionally, analysis of variance (ANOVA) was utilized to determine if suicide prevention training in college and in the last five years was related to teachers' levels of reported comfort and confidence in identifying and intervening with suicidal students. To avoid making a Type 1 error, throughout the data analyses, the level required for statistical significance was set at a conservative level of $p \leq .01$.

Results

In this section, the data are summarized to address this study's proposed research questions. More specifically, participants' responses provided the basis for describing teachers' perceived roles in adolescent suicide prevention and their comfort and confidence in identifying and assisting suicidal students.

Teachers' Perceived Roles in Adolescent Suicide Prevention

Overall, teachers agreed that they have a role in suicide prevention. Endorsement statistics for questions regarding teacher roles are listed in Table 2. It is important to note that only one of 74 teachers indicated disagreement when asked if teachers *should* have a role in suicide prevention. Additionally, when comparing teachers' responses to statements regarding roles in suicide prevention, the majority of participants endorsed some form of agreement to all four questions listed in Table 2. However, a greater percentage of teachers endorsed "Neutral" or some form of "Disagree" to two statements: "Teacher's major focus should be on academics" and "...you currently have a role in suicide prevention."

Table 2

Percentages, Means, and Standard Deviations Describing Teachers' Agreement/Disagreement to Survey Questions Regarding Roles ($N = 74$)

Percentage of teachers responding in each response category							
Disagree Very Strongly	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Agree Very Strongly	*M* (*SD*)
Teachers should have a role in suicide prevention.							5.72
0	0	1.4	4.1	40.5	28.4	24.3	(.93)
Teacher's major focus should be on academics.							5.11
0	1.4	10.8	12.2	35.1	31.1	8.1	(1.15)
Teachers have a responsibility to help their students emotionally.							5.25
0	1.4	0	8.1	58.1	24.3	5.4	(.80)
As a teacher do you AGREE/DISAGREE that you <u>currently</u> have a role in suicide prevention?							5.20
0	0	8.1	16.2	36.5	24.3	13.5	(1.12)

Note. Numbers indicate percentage of teachers' responses across each Likert scale anchor point.

Results from the pilot study indicated four common responses to the prompt, "If you currently have a role in suicide prevention, please explain that role." These four responses were included on the final survey as response options to the question, "As a teacher, which of the following things do you currently do? (Check all that apply.)"

Table 3 includes these four possible roles in suicide prevention and lists the percentage of teachers who currently engage in those roles. The majority of teachers (80%) reported stepping in when students are being bullied. Additionally, 77% reported listening for warning signs of suicide in student conversation. However, only one-third of teachers offered their availability to talk with students about "suicide and other personal issues." Only 7% of teachers reported acting as a member of the school crisis management team.

Table 3

Current Roles in Suicide Prevention: Teachers' Self-Reported Activities (*N* = 74)

Current role	Number and percentage who endorsed role
Step in when students are bullied.	59 (80%)
Listen for warning signs of suicide in student conversation.	57 (77%)
Inform students of your availability to talk about suicide and other personal issues.	25 (34%)
Act as a member of the school crisis management team.	5 (7%)

Teachers' Comfort and Confidence in Identifying and Helping Suicidal Students

Four questions asked participants to indicate how comfortable and confident they would be when identifying or helping a potentially suicidal student. Response options to these questions included seven anchor points, ranging from *Disagree very strongly* to *Agree very strongly*. All paired samples tests used to detect differences in teachers' responses were 2-tailed and the significance level (*p*) was set at a conservative .01 level.

Overall, teachers reported being more *comfortable* identifying potentially suicidal students than they were *confident* in identifying potentially suicidal students, $t(73) = 5.663$, $p < .001$. Similarly, teachers reported being more *comfortable* helping potentially suicidal students than they were *confident* in their ability to help potentially suicidal students, $t(73) = 5.291$, $p < .001$. However, no significant differences were found between teachers' comfort in *identifying* potentially suicidal students and teachers' comfort in *helping* suicidal students, $t(73) = 1.652$, $p = .103$. Likewise, no significant differences were found between teachers' confidence in *identifying* potentially suicidal students and teachers' confidence in *helping* suicidal students,

$t(73) = 1.055$, $p = .295$. A summary of endorsement statistics for all four statements is included in Table 4.

When considering the mean response to each of these statements, ranging from 1 (*Disagree very strongly*) to 7 (*Agree very strongly*), teachers demonstrated stronger agreement to *comfort* statements when compared to *confidence* statements. Similarly, teachers endorsed stronger agreement to statements about identifying potentially suicidal students when compared to statements about helping potentially suicidal students. Table 4 also identifies the mean (*M*) response and standard deviation (*SD*) for each question regarding teachers' comfort and confidence when identifying and helping potentially suicidal students.

Table 4

Teachers' Comfort and Confidence with Suicide Prevention Roles: Percentages, Means, and Standard Deviations Describing Teachers' Responses ($N = 74$)

Disagree Very Strongly	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Agree Very Strongly	*M* (*SD*)
I would be *comfortable identifying* a potentially suicidal student.							5.12 (1.06)
0	1.4	4.1	16.2	50	13.5	13.5	
I would be *confident identifying* a potentially suicidal student.							4.47 (1.19)
0	6.8	8.1	35.1	36.5	4.1	8.1	
I would be *comfortable helping* a potentially suicidal student.							4.91 (.99)
0	0	8.1	20.3	52.7	8.1	9.5	
I would be *confident helping* a potentially suicidal student.							4.34 (1.10)
0	2.7	17.6	37.8	31.1	2.7	6.8	

Note. With the exception of the column of means (*M*) and standard deviations (*SD*) to the far right, numbers in this Table are percentages of teachers' responses across each Likert scale anchor point.

Relationship of perceived roles with comfort and confidence. Participants who agreed that "Teachers should have a role in suicide prevention" were also likely to agree with statements endorsing feeling comfortable when identifying potentially suicidal students (r = .370; p = .001) and feeling comfortable when helping potentially suicidal students (r = .415; p <.001). More specifically, the statements, "I would be *comfortable identifying* a potentially suicidal student" and "I would be *comfortable helping* a potentially suicidal student" were both significantly correlated with teachers' perceptions of the need to take a role in suicide prevention. However, the statements, "I would be *confident identifying* a potentially suicidal student" and "I would be *confident helping* a potentially suicidal student" were not significantly correlated with participating teachers' perceptions of the need to take a role in suicide prevention. Refer to Table 5 for the associated bivariate correlations and statistical significance levels.

When comparing the teachers' comfort and confidence responses (7-point Likert scale) with their response to the statement, "Teachers' major focus should be on academics" (agree-disagree 7-point Likert scale), only one statistically significant correlation was noted. This correlation was a negative correlation with teachers' perceptions regarding if they should have a role in suicide prevention (r = -.303; p = .009). This indicates that the stronger emphasis teachers placed on academics, the less they endorsed the need for teachers to have a role in suicide prevention.

Additionally, responses to the statement "Teachers have a responsibility to help their students emotionally" (agree-disagree 7-point Likert scale) were only significantly correlated with participants' expressed comfort in helping a potentially suicidal student (r = .413; $p \leq .001$). In addition, responses to the question, "As a teacher do you AGREE/DISAGREE that you

currently have a role in suicide prevention?" (response option—agree-disagree 7-point Likert scale) were significantly correlated to participants' expressed comfort identifying a potentially suicidal student at the .01 level. However, comfort helping a potentially suicidal student did not reach a level of statistical significance. Overall, teachers' comfort statements were more likely to be correlated to statements about teachers' roles in suicide prevention than teachers' confidence statements.

Table 6 contains the correlations among seven of this study's variables: comfort in identifying suicidal students, confidence in identifying suicidal students, comfort in helping suicidal students, confidence in helping suicidal students, and the three potential barriers to becoming involved in suicide prevention: lack of training, fear of making the situation worse, and fear of legal repercussions. Lack of training was significantly correlated with teachers' reported fear of making the situation worse and fears of legal repercussions. Additionally, the degree of comfort and confidence in identifying and helping potentially suicidal students was not significantly correlated with the listed reasons for discomfort (lack of training, fear of making the situation worse, and fear of legal repercussions).

Relationship of teachers' training and experience on comfort and confidence. In addition to questions about teacher roles and comfort and confidence, participants were also asked about their training and experiences in youth suicide prevention. In response to the question, "As a teacher have you received suicide prevention training in the last five years?" 55.4% (n = 74) endorsed "Yes," 39.1% endorsed "No," and 4% endorsed "I don't remember."

Table 5

Correlations Among Teachers' Comfort and Confidence in Identifying and Helping Suicidal Students (SS) and Reasons for Discomfort (*N* = 74)

		Comfortable identifying SS	Confident identifying SS	Comfortable helping SS	Confident helping SS	Uncomfortable because lack training	Uncomfortable because fear making situation worse	Uncomfortable because legal fears
Comfortable identifying SS	*r*	1.000	**.619****	**.401****	.187	.125	.001	.106
	p		<.0001	<.0001	.110	.289	.994	.368
Confident identifying SS	*r*	**.619****	1.000	**.329****	**.537****	-.078	-.177	.039
	p	<.0001		.004	<.0001	.511	.132	.744
Comfortable helping SS	*r*	**.401****	**.329****	1.000	**.617****	.278	.097	.064
	p	<.0001	.004		<.0001	.017	.409	.587
Confident helping SS	*r*	.187	**.537****	**.617****	1.000	-.064	-.231	-.185
	p	.110	<.0001	<.0001		.587	.048	.114
Uncomfortable because lack training	*r*	.125	-.078	.278	-.064	1.000	**.751****	**.538****
	p	.289	.511	.017	.587		<.0001	<.0001
Uncomfortable because fear making situation worse	*r*	.001	-.177	.097	-.231	**.751****	1.000	**.715****
	p	.994	.132	.409	.048	<.0001		<.0001
Uncomfortable because legal fears	*r*	.106	.039	.064	-.185	**.538****	**.715****	1.000
	p	.368	.744	.587	.114	<.0001	<.0001	

** Correlation is significant at the 0.01 level (2-tailed); p≤ .01.

Table 6

Correlations Among Teachers' Comfort and Confidence in Identifying and Helping Suicidal Students (SS) and Roles in Suicide Prevention (SP)

		Should have role in SP	Focus on academics	Help students emotionally	Current role in SP	Comfortable identifying SS	Confident identifying SS	Comfortable helping SS	Confident helping SS
Should have role in SP	*r*	1.000	**-.303****	.171	**.726****	**.370****	.285*	**.415****	.215
	p		.009	.147	<.0001	.001	.014	<.0001	.065
Focus on academics	*r*	**-.303****	1.000	.116	-.250*	-.078	.112	-.015	.197
	p	.009		.329	.032	.508	.340	.900	.092
Help students emotionally	*r*	.171	.116	1.000	.241*	.050	.024	**.413****	.128
	p	.147	.329		.040	.676	.842	<.0001	.282
Current role in SP	*r*	**.726****	-.250*	.241*	1.000	**.348****	.215	.263*	.110
	p	<.0001	.032	.040		.002	.065	.024	.351
Comfortable identifying SS	*r*	**.370****	-.078	.050	**.348****	1.000	**.619****	**.401****	.187
	p	.001	.508	.676	.002		<.0001	<.0001	.110
Confident identifying SS	*r*	.285*	.112	.024	.215	**.619****	1.000	**.329****	**.537****
	p	.014	.340	.842	.065	<.0001		.004	<.0001
Comfortable helping SS	*r*	**.415****	.015	**.413****	.263*	**.401****	**.329****	1.000	**.617****
	p	<.0001	.900	<.0001	.024	<.0001	.004		<.0001
Confident helping SS	*r*	.215	.197	.128	.110	.187	**.537****	**.617****	1.000
	p	.065	.092	.282	.351	.110	.000	<.0001	

Note. $N = 74$; SS = suicidal student; SP = suicide prevention.

*****$.05 \leq p > .01$; **not** considered statistically significant (2-tailed).

****** $p \leq .01$; correlation is statistically significant at the 0.01 level (2-tailed).

Potential Barriers to Teachers Participating in Suicide Prevention

In the Pilot survey, participants were asked why teachers might feel uncomfortable or lack confidence identifying or intervening with a suicidal student. The most common answers included the following three themes: teachers might lack the appropriate training, teachers might fear making the situation worse, and teachers might fear legal repercussion. To address the potential barriers, the final survey included the statements shown in Table 7 with seven response options from "Disagree very strongly" to "Agree very strongly."

Although the language in these questions is somewhat inconsistent, participant responses followed a similar pattern for all three questions. More than 70% of the participants endorsed some form of agreement, while very few endorsed any level of disagreement on all three barrier questions. Descriptive statistics summarizing teachers' response to these questions are summarized in Table 7.

Table 7

Barriers to Teachers Intervening with Potentially Suicidal Students: Percentages, Means, and Standard Deviations Describing Teachers' Agreement/Disagreement ($N = 74$)

Disagree Very Strongly	Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly	Agree Very Strongly	*M* (*SD*)
Teachers may be uncomfortable helping and identifying suicidal students because they lack the appropriate training.							5.08 (1.17)
1.4	1.4	6.8	10.8	48.6	18.9	10.8	
Teachers may be uncomfortable helping suicidal students for fear of making the situation worse.							4.88 (1.29)
1.4	4.1	10.8	8.1	51.4	12.2	10.8	
Teachers may be uncomfortable identifying and helping suicidal student because they fear legal repercussion.							5.07 (1.39)
1.4	2.7	9.5	13.5	39.2	12.2	20.3	

Note. Numbers in this table represent percentage of teachers' responses across each Likert scale anchor point.

Discussion

While there is still much to learn about adolescent suicide prevention, identifying how key players can effectively participate in these efforts is imperative (Hooven, Walsh, Pike, & Herting, 2012; Nadeem et al., 2011). Likewise, understanding the barriers to suicide prevention and intervention can open roads to more effective and efficient care for suicidal youth. The literature on teacher roles in adolescent suicide prevention confirms that teachers are knowledgeable in some areas, but not in others (Konopinski, 2011; Nadeem et al., 2011; Williamson, 2010). While this study did not seek to identify gaps in teacher knowledge of suicide prevention strategies or facts, it did investigate barriers to teacher participation in suicide prevention.

Based on the information gathered in the current study, the greatest barrier to helping potentially suicidal students was teachers' lack of confidence in providing that assistance. Teacher training in suicide prevention appears to have a positive impact on comfort and confidence, as teacher who had been trained over the previous five years were more comfortable and confident in identifying and helping potentially suicidal students. Similarly, teachers with direct experience with suicidal students (e.g., indicated a student had confessed to being suicidal or reported a classmate was suicidal), were more likely to agree with the comfort and confidence statements found in Table 4.

Participants in this study were not offered operational definitions of comfort and confidence. Yet teachers overwhelmingly identified less confidence than comfort, indicating a clear distinction between the two terms. A dictionary definition identifies comfort as a state in which fear, anxiety, or physically unpleasant feelings are absent, while confidence is a feeling or belief that you can do something well or succeed at something (Webster Inc., 2004). Comfort

appears to have more to do with an individual's state of being, while confidence is based on the future outcome of some action. It is possible that participants were acknowledging their ability to identify and assist suicidal students in theory, but were unsure of their ability to perform such tasks in applied practice.

Implications for Practice

Teacher training is vital to the success of evidence-based suicide prevention programs (Johnson & Parsons, 2012; Nadeem et al., 2011). Participants in this study overwhelmingly agreed that teachers may be uncomfortable helping and identifying suicidal students because they lack appropriate training. The results of this study demonstrate not only a need for greater access to information about suicide prevention, but opportunities for teachers to practice what they have learned by role playing possible scenarios (Cross et al., 2011; Johnson & Parsons, 2012; Nadeem et al., 2011).

If lack of confidence is the barrier to actually helping a potentially suicidal student, then training programs should be designed to build confidence. These training programs should include explicit instruction on how to identify potentially suicidal students, as well as district policies regarding how to help such students. In addition, teachers must receive instruction about the potential outcomes of interventions (e.g., talking about suicide does not increase suicide risk) and individual liability for providing assistance. Training must also include details about appropriate responses to at-risk students, as well as opportunities to role play and practice scenarios (Cross et al., 2011).

Developing a school-based suicide prevention program, preparing and offering a teacher training program, and creating and implementing district policy to align with a suicide prevention program may seem like a daunting agenda. However, a number of free resources for

developing such programs and policies are available online. Resources listed in Table 8 provide practical information and tools for training educators and offer insights about developing and training for school-based suicide prevention programs.

Table 8

Selected Resources for Training Teachers and Developing School-Based Suicide Prevention Programs

Resource	Summary
More than Sad: Suicide Prevention Education for Teachers and Other School Personnel American Foundation for Suicide Prevention (AFSP), 2009	This program includes a manual for educators and video clips for training purposes. The manual details facts about adolescent suicide and outlines how teachers can help prevent it. Specifically, *More than Sad* encourages teachers to be aware of the warning signs of mental illness, so they connect students to the appropriate resources. • http://www.morethansad.org/programmanual.pdf • http://www.morethansad.org/videopts.html
Preventing Suicide: A Toolkit for High Schools Substance Abuse and Mental Health Services Administration (SAMHSA), 2012	This toolkit includes directions for identifying the needs of the school, increasing system-wide support of suicide prevention programs, as well as selecting and implementing the programs that best fit the needs of the specific school and community. • http://store.samhsa.gov/shin/content//SMA12-4669/SMA12-4669.pdf
The Role of High School Teachers in Preventing Suicide Suicide Prevention Resource Center (SPRC), 2012	This seven page resource identifies specific steps to reducing suicide risk in the schools. This guide also includes two pages of suicide prevention program summaries and website information for each program. A number of resources are listed for finding more information about suicide prevention among lesbian, gay, bisexual, transgender, and questioning (LGBTQ) youth. • http://www.sprc.org/sites/sprc.org/files/Teachers.pdf

Limitations

As this study was conducted with a convenience sample from one Western U.S. suburban school district, the results from this sample may not be generalizable to other populations. In addition, over the previous decade this particular school district has taken on a

number of initiatives to prevent adolescent suicide. Although this survey investigated teachers' perceptions, these perceptions may change across time depending on training and experiences with suicidal adolescents.

Survey results indicated more than 50% of the participants received suicide prevention training in the last five years. Consequently, these teachers' perceptions of their roles in suicide prevention may have been influenced by the suicide prevention policies and programs implemented by the district.

Another limitation is that this study's survey only investigated teachers' perceptions. Observations were not conducted to investigate teachers' actual performance in their ability and skill to effectively intervene with suicidal youth. Additionally, adolescents were not given the opportunity to offer their feedback regarding perceptions of teachers' actual roles in suicide prevention and the effectiveness of teachers' intervention when students were contemplating suicide.

Implications for Future Research

This study focused primarily on teachers, but there are a number of individuals who have the potential to provide much needed help to adolescents struggling with suicidal thoughts and feelings (Hooven et al., 2012; SAMSHA, 2012). In addition to a more in-depth study of teachers' perceived barriers to participating in suicide prevention, it would be valuable to identify other individuals who may participate in suicide prevention efforts (e.g., parents, peers, clergy) and their perceived barriers to participation.

In addition, future research may evaluate teachers' comfort and confidence in their ability to perform specific aspects of school-based suicide prevention programs. For example, these

functions might include the following elements of effective school-based suicide prevention programs (Berman et al., 2006; Suicide Awareness Voices of Education, 2007):

- Teachers must be aware of risk factors and warning signs to detect potential suicide risk.
- Teachers should know how to make referrals when concerned about a potentially suicidal student.
- Teachers should help students feel comfortable when seeking assistance.
- Teachers should be aware of available supportive resources for students and staff.
- Teachers should be aware of school policies on suicide prevention and postvention.
- Teachers should integrate suicide prevention into the school-wide curriculum.

Conclusion

Whether or not teachers are trained in suicide prevention, opportunities to participate in suicide prevention often present themselves (SPRC, 2012). Suicide prevention is more than simply preventing an individual from taking their own life. At its very core, suicide prevention is about recognizing and alleviating the worst kind of pain—the pain of not belonging, the pain of being a burden (Joiner, 2005).

Teachers have an extraordinary opportunity to support their students, and help them access lifesaving resources in times of crisis (Freedenthal & Breslin, 2010; SPRC, 2012). To do this, teachers need to be aware of the appropriate course of action, and have the confidence to perform that action (Cross et al., 2011). Ultimately, educators must be self-aware—mindful of the barriers that separate them from adolescents who so desperately need their help.

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APPENDIX A: LITERATURE REVIEW

The topic of suicide has a long and intense history. Motivated by a wide variety of emotions—including pride, grief, jealousy, shame, and despair—suicides were commonly included in Greek and Roman mythology (Hard, 2004). Additionally, suicide is often romanticized in popular culture and media (e.g., Shakespeare's *Romeo and Juliet*; 1970's television comedy/drama MASH theme song, *Suicide is Painless*). Propelling the topic of suicide to front-page headlines, suicides of media icons include Marylyn Monroe's drug overdose in 1962 and Kurt Cobain's suicide in 1994. More recently, the American Psychiatric Association (2012) and the American Psychological Association (2010) have stepped up efforts to address the escalating suicide rates in returning military veterans.

Considering suicide within a specific age-group, members of the Vienna Psychoanalytic Society, including Sigmund Freud, met together for a symposium to discuss adolescent suicide and its causes (Freidman, 1967). During this symposium, D. E. Oppenheim stated,

> Suicide in youthful years is a social phenomenon that stretches much further back in our history than our newspaper scribes imagine. It did not await cultivation by secondary school teachers with autocratic tendencies…. The first evidence of this terrible paradox of suicide in youthful years emerged in the Renaissance…. By the second half of the eighteenth century, the cases were already so numerous that they demanded statistical registration. (Freidman, 1967, pp. 37–38)

Clearly adolescent suicide is neither a new problem nor a uniquely American problem. Worldwide, over 100,000 adolescents commit suicide each year (American Foundation for Suicide Prevention [AFSP], 2012). Many scholars have poured over facts, myths, and accounts

of adolescent suicide to obtain a better understanding of this phenomenon. Although much has been learned over the last century concerning adolescent suicide, there is still much to uncover (Paris, 2006).

Prevalence of Adolescent Suicide

In 2011 the Centers for Disease Control and Prevention (CDC, 2011) completed their latest nationwide Youth Risk Behavior Surveillance report (YRBS). In this report, the CDC estimated that 7.8% of students from ninth to twelfth grade attempt suicide and 15.8% seriously consider suicide each year (CDC, 2011). According to the current United States population statistics provided by the U.S. Census Bureau individuals from 14 years old to 18 years old account for 6.7% of the total population or 21,030,938 adolescents (United States Census Bureau, 2012). Based on this population estimate and the most recent YRBS results, Table 1 demonstrates the number of adolescents who attempted suicide, made a suicide plan, seriously considered suicide, and felt sad or hopeless every day consecutively for two weeks or more during a one year period in the United States and in a classroom with 30 students (CDC, 2011; United States Census Bureau, 2012).

Table 1
Adolescent Suicidal Behavior Risk Statistics

Behavior in the Previous 12 Months	Percentage[a]	Total population ages 14-18[b] (21,030,938)	In a classroom with 30 students
Attempted Suicide	7.8	1,640,413	2
Made a Suicide Plan	12.8	2,691,960	4
Seriously Considered Suicide	15.8	3,322,888	5
Felt Sad/Hopeless Every Day For More Than Two Weeks	28.5	5,993,817	9

[a]According to the 2011 Youth Risk Behavior Survey (CDC, 2011, 2012).
[b]According the 2012 US Census (United States Census Bureau, 2012) total population on July 4, 2012 was 313,894,601.

Though many youth in the U.S. contemplate and attempt suicide, tragically each year approximately 4,400 youth complete suicide (AFSP, 2012; CDC, 2011; Walter & Petr, 2008). While the number of adolescent suicides has decreased over the last two decades (Gould, Greenberg, Velting, & Shaffer, 2003), since the 1950s the overall suicide rate for young people increased by more than 300 % (Berman, Jobes, & Silverman, 2006). Berman et al. (2006) used data from the CDC's Youth Risk Behavior Surveillance report to estimate as many as 800 adolescents attempt suicide for every one completed suicide. Despite this estimate, it is extremely difficult to calculate the number of adolescents who actually attempt suicide each year.

In one study, researchers reviewed hospital admissions in eight states and identified the records of 12,105 adolescents who were seen as a result of attempted suicide. Of those 12,105 almost 4% actually died as the result of their self-inflicted injuries. Data gathered in this study indicated there were approximately 24.5 attempted suicides for every one completed (Spicer & Miller, 2000). Though this ratio is significantly smaller than 800:1, this estimate only accounts for cases in which youth were treated in hospitals. Additionally, estimating an accurate number of suicide attempts is exceptionally difficult due to the unknown number of attempts that do not result in hospitalization or other medical treatment (Berman et al., 2006; Spicer & Miller, 2000).

Suicide Risk Factors

According to Klerman, "A risk factor is a statistically based association between some characteristic or attribute of an individual, group, or environment and an increased probability of certain diseases or disease related-phenomena or outcomes" (1987, p. 34). Adolescent suicide is a phenomenon that has a number of risk factors. Suicide is rarely the result of one cause or circumstance and there are many factors involved in a young person's choice to end their own

life (Berman et al., 2006; Poland & Lieberman, 2002). The most prevalent risk factors can be grouped into the following categories: personal characteristics, demographic characteristics, and family correlates (Debski, Spadafore, Jacob, Poole, & Hixson, 2007). Additionally, it is important to be aware of precipitating events leading up to a suicide attempt as well as behavioral warning signs and contributing mental health disorders (Debski et al., 2007).

Personal characteristics. Often adolescents who struggle with suicidal ideation or who attempt suicide display personal characteristics which serve as warning signs, alerting adults of potential problems (Debski et al., 2007; Poland & Lieberman, 2002). These personal characteristics may include biological deficits, poor problem solving skills, social isolation, cognitive factors, and sexual orientation (King & Apter, 2003; Miller & Eckert, 2009). Internal factors such as low self-esteem are also common risk factors for adolescent suicide (Gutierrez & Osman, 2008). Young people with a positive view of themselves are more likely to see value in their lives while adolescents with low self-esteem are more likely to see themselves as worthless (Overholser, Adams, Lehnert, & Brinkman, 1995). Additionally, a 2005 study revealed students with a negative perception of their academic performance were at a higher risk for suicide (Martin, Richardson, Bergen, Roeger, & Allison, 2005). This study also examined the effects of self-esteem and locus of control on suicidality. Both self-esteem and locus of control were significantly associated with suicidality (Martin et al., 2005).

Drug and alcohol use, as well as other risky behaviors, also have a high correlation with adolescent suicide attempts (American Academy of Pediatrics, 2000; King & Apter, 2003). In 2001 King et al. conducted a study to identify the relationship between risk behavior and suicide attempts and ideation. This study found suicide attempters were more likely than suicide ideators to have had a history of stressful life events, sexual activity, smoking more than one

cigarette per day, and smoking marijuana or hashish. This study measured five problem behaviors and found that suicide ideation and attempts were significantly associated with each. The five identified problem behaviors were, early onset of sexual intercourse, ever having smoked marijuana, currently smoking more than one cigarette per day, becoming drunk in the last six months, and having been in a fight involving punching or kicking in the last year (King et al., 2001).

In addition to high risk behaviors, sexual orientation has a relationship with suicide rates (American Academy of Pediatrics, 2000; King & Apter, 2003; Remafedi, Farrow & Deisher, 1991). It is difficult to obtain an accurate number of suicides due to many factors involved in determining cause of death. Although it is especially difficult to accurately estimate the number of suicides committed by Lesbian, Gay, Bisexual, Transgender, and Questioning (LGBTQ) individuals, there has been a marked rise in LGBTQ adolescent suicides (Smith & Drake, 2001). Recent estimates suggest homosexual adolescent males are six to seven times more likely to attempt suicide than heterosexual adolescent males (Meichenbaum & Keeley, 2010; Smith & Drake, 2001). Smith and Drake (2001) estimate that 20 to 67% of LGBTQ teens attempt suicide.

Demographic characteristics. Although an adolescent's demographic information is not indicative of suicidal intent, some demographic characteristics show a higher correlation with suicide than others. For example suicide completion rates among males are higher than females while suicide attempts are more prevalent among females (Berman et al., 2006; King & Apter, 2003; Miller & Eckert, 2009). Conducted by the CDC every other year, the most current YRBS data shows 18.7% of female and 10.3% of male adolescents seriously consider committing suicide (CDC, 2011). Traditionally, although females are more likely to think about and attempt

suicide they are less likely to complete suicide due to the non-lethality of their chosen means (King & Apter, 2003). Males are more likely to choose extremely lethal means of death such as fire arms or hanging (Moscicki, 1995).

Although there is a strong relationship between gender and suicide, there are many other demographic characteristics tied to suicidal behavior. Of these characteristics race and ethnicity have a strong relationship with suicide. Of the three largest ethnic groups in the United States Caucasians are more likely to commit suicide than African Americans or Latinos (Berman et al., 2006; King & Apter, 2003). However, the rate of male African American adolescent suicide has increased 234% between 1960 and 2000 (Miller & Eckert, 2009; Utsey, Hook, & Stanard, 2007). Suicide is also a major concern in the Native American population. Native Americans have the highest suicide rate of any other ethnicity in the US (King & Apter, 2003; National Center for the Prevention of Youth Suicide, 2012). On the other end of the spectrum Pacific Islanders, Asian Americans, and Hispanics have the lowest suicide rates in the country (National Institute of Mental Health, 2010).

Overall, the national suicide rate is 12 out of 100,000 (American Foundation for Suicide Prevention, 2012). Some states like New York and New Jersey have much lower rates at 7.3 and 6.4 respectively (American Foundation for Suicide Prevention, 2012). The North Eastern U.S. has the lowest rates of suicide than any other region (King & Apter, 2003). Alternatively the Western United States, with the exception of Hawaii, consistently has the highest suicide rates in the country (King & Apter, 2003). The six states with the highest suicide rates are all in the Western US with the highest suicide rate of 20.5 in Alaska (American Foundation for Suicide Prevention, 2012). This may be due to lower population densities in these states (Joiner, 2005).

Another demographic characteristic that is highly correlated with adolescent suicide behavior is incarceration (Husain & Vandiver, 1984). Adjudicated youth have an extremely high rate of suicide attempts (Allen-Hagen, 1993). A 1993 report from the Department of Justice's Office of Juvenile Justice and Delinquency Prevention (OJJDP) stated 11,000 juveniles in the justice system committed 17,600 suicide attempts (Allen-Hagen, 1993). Another report showed 63% of all youth suicides in Utah were completed by males in the juvenile justice system (Moskos, Halbern, Alder, Kim, & Gray, 2007). These elevated rates may be due to the increased rates of mental illness in the criminal justice system as well as the separation of these youths from their families and other support networks (Kretschmar & Flannery, 2011).

In a recent study, conducted by the OJJDP, 110 cases of suicide within the juvenile justice system were examined to determine the nature of these suicides. Of the 110 cases examined 89 percent were in facilities which had a written suicide prevention plan, 72 percent occurred in facilities that screened for suicide risk upon admission, 75 percent occurred in facilities where the staff was trained in suicide prevention, and 50 percent of the suicides occurred in places where suicidal youth were monitored at least four times per hour. Though these prevention efforts have lowered the number of suicides in this population, incarcerated youth are still highly at risk for suicide (Hayes, 2009).

Family correlates. Though suicidality is not a genetic trait it can be greatly influenced by an adolescent's family (King & Apter, 2003). Some of the family factors that can have an impact on adolescent suicidality are family history of suicide, family history of psychopathology, parental divorce, poor parent-child relationships, physical and sexual abuse, and a hostile home environment (Gutierrez & Osman, 2008; King & Apter, 2003). Situations that lead to a disruption in the parent/ child relationship are significantly linked to suicidal behavior in

adolescents (Timmons, Selby, Lewinsohn, & Joiner, 2011). Children and adolescents need to feel safe and supported at home.

One study showed a significant correlation between adolescents with displaced parents and suicide attempts ($r = .08$, $p < .01$). This study defined the term "displaced parents" as one or more of the following scenarios; the adolescent was sent away from home as a punishment, parent abandonment, living in orphanage or foster home, being forced to live away from parents, and parents becoming separated or divorced (Timmons et al., 2011). There are multiple studies that identify parental support as a protective factor for adolescent suicide (Kidd, et al., 2006; Maimon, Browning, & Brooks-Gunn, 2010). One of these studies looked specifically at family attachment as a protective factor and found adolescents with higher family attachment levels were less likely to attempt suicide (Maimon, et al., 2010).

Precipitating events. In their 1987 book, *Crisis Intervention and Suicide Prevention,* Crow and Crow suggest, "For young people, perception is reality; loss is whatever feels like loss to the young person. The key is to understand that suicidal crises in young people are almost always precipitated by a significant loss or combination of loss factors" (p.73). The types of loss that precede a suicide attempt can vary greatly from one case to another. Interpersonal loss, such as the breakup of a romantic relationship, is a common type of loss which can precipitate a suicide attempt (Crow & Crow, 1987; King & Apter, 2003). Other types of loss that can act as a catalyst to suicide include; loss of hope or a future opportunity, status or position, perception of a valued person leading to disillusionment, sense of control, and health or physical ability (Crow & Crow, 1987; King & Apter 2003).

Behavioral warning signs. Though some adolescents are more at risk than others there are certain warning signs which should be watched for regardless of the circumstances. These

warning signs may or may not indicate a suicidal student but each warning sign does indicate a student in need of help. The American Foundation for Suicide Prevention (AFSP) and the Suicide Prevention Resource Center (SPRC) recently released a toolkit to help school personnel manage crises after a suicide has occurred. This toolkit also includes a list of warning signs to watch for in suicide prevention. These warning signs include:

- Talking about wanting to die or kill oneself;
- Looking for ways to kill oneself, such as searching online or buying a gun;
- Talking about feeling hopeless or having no reason to live;
- Talking about feeling trapped or in unbearable pain;
- Talking about being a burden to others;
- Increasing the use of alcohol or drugs;
- Acting anxious or agitated, or behaving recklessly;
- Sleeping too little or too much;
- Withdrawing or feeling isolated;
- Showing rage or talking about seeking revenge; and
- Displaying extreme mood swings (American Foundation for Suicide Prevention & Suicide Prevention Resource Center, 2011, p. 26).

Contributing mental disorders. One risk factor found in approximately 90% of suicides is the presence of depression or some other form of mental illness (King & Apter, 2003; National Institute of Mental Health, 2010). Though this statement does not accurately characterize the heterogeneous nature of mental illness associated with suicide it does capture the sentiment that mental illness if often at the root of suicide. Major Depressive Disorder is one of the leading causes of suicide but there are other mental illnesses that can also affect a person's

likelihood to take their own life (Verona & Javdani, 2011). Other disorders which have been linked to suicide include, Generalized Anxiety Disorder, Bipolar Disorder, Substance Use Disorder, and Conduct Disorder (Portzky, Audenaert, & van Heering, 2009; Verona & Javdani, 2011)

Teachers' Roles in Suicide Prevention

With the exception of parents, adolescents generally spend more time with teachers than any other adults. Teachers are ideally placed to notice which of their students may be contemplating suicide (King, Price, Telljohann, & Wahl, 1999; Pires, 2011). Teachers need training to help them recognize suicide risk factors (Westefeld, Kettman, Lovmo, & Hey, 2007). In 1999 the US Surgeon General released a call to action to prevent suicide in the United States. This call to action proclaims, "We must institute training about suicide risk assessment, treatment, management and aftercare for all health, mental health, substance abuse and human service professionals – including clergy, teachers, correctional officers, and social workers" (Department of Health and Human Services, 1999, p. 4). Training teachers about suicide risk and warning signs is imperative to adolescent suicide prevention. Additionally, teachers need training to effectively intervene with suicidal students.

What teachers know. It would be unfair to suggest teachers do not know anything about suicide or suicide prevention. Of the studies examining teacher's knowledge of suicide facts, many showed teachers were aware of some important issues involving adolescent suicide (Pires, 2011; Williamson, 2010). Teachers often correctly answer questions involving relevant clinical factors but were not as familiar with statistics and interventions. The questions answered correctly included information about common risk factors and methods of suicide

(Konopinski, 2011; Pires, 2011; Westefeld et al., 2007). For example in Konopinski's 2011 study, teachers correctly answered the following questions between 90 to 100% of the time:

- Females and males are similar in their choice of means of attempting suicide. (Answer: FALSE – Percent Correct: 96)
- Family psychopathology is not considered to be a risk factor when evaluating adolescent suicide potential. (Answer: FALSE – Percent Correct: 90)
- The two most common methods of suicide for males are hanging and firearms. (Answer: TRUE – Percent Correct: 90)
- The most common method for suicide in females is ingestion of substances (i.e., pills). (Answer: TRUE – Percent Correct: 95)
- Parent-child discord is not a risk factor for suicide. (Answer: FALSE – Percent Correct: 92)

In a 2007 study conducted by Westefeld et al., teachers were asked to indicate which risk factors they believed were key risk factors. The five most endorsed risk factors included; alienation from peers 88%, history of depression 85%, hopelessness 84%, family problems 78%, and victim of bullying by relative(s)/peer(s) 74%. Although teachers are not fully aware of all adolescent suicide risk factors, these results indicate many teachers are aware of at least some key risk factors.

What teachers do not know. Although teachers are somewhat knowledgeable about suicide and suicide prevention, there are some areas in which teachers lack the knowledge necessary to intervene with suicidal students. In the ground breaking study conducted by King, Price, Telljohann, and Wahl, these researchers found 70% of the high school health teachers who participated in the study felt it was their responsibility to identify suicidal students but only 9%

believed they could recognize such a student (1999). This study lead to more studies, aimed at identifying teachers' knowledge of suicide prevention. These studies reported many teachers were lacking in the areas of intervention, statistics, and school district policies regarding suicide prevention (Konopinski, 2011; Westefeld et al., 2007).

In one recent study, teachers were asked how they responded when a student appeared suicidal. Of the 122 participants who responded, almost half reported they did nothing (Westefeld et al., 2007). Though this study did not address teachers' reasons for not responding to potentially suicidal students it is possible teachers did not take action because they were unsure of how to respond. In another study, teachers were asked about their school district's policy regarding suicidal students. Despite the fact that the district did have a policy in place, 63% of teachers reported not knowing about their school's policy (Konopinski, 2011).

What teachers should know. Ideally all teachers who interact with adolescents would be knowledgeable about suicide prevention and intervention practices. Unfortunately this is not the case (King, Price, Telljohann & Wahl, 1999; Konopinski, 2011; Pires, 2011; Westefeld et al., 2007). Adolescent suicide prevention is an enormous task with major repercussions; despite the magnitude of this objective it is imperative that every person involved plays a part (Department of Health and Human Services, 1999). The US Surgeon General listed a number of community members, including teachers, that should be trained and ready to help prevent suicide and current research indicates teachers play an important role in suicide prevention (American Foundation for Suicide Prevention, 2012). When teachers are aware of suicide risk and interventions they are in a stronger position to make life saving referrals (American Foundation for Suicide Prevention & Suicide Prevention Resource Center, 2011).

Unfortunately many teachers are unaware of how they can contribute to adolescent suicide prevention (King et al., 1999; Westefeld et al., 2007). Additionally, teachers may feel uncomfortable and/or lack confidence in their abilities to identify warning signs and intervene with suicidal students.

To help teachers feel more comfortable responding to suicidal students it may help to develop an in depth suicide prevention program. One study showed teachers and counselors' confidence in working with suicidal students increased after attending a suicide prevention training (Reis & Cornell, 2008). In their 2006 book, *Adolescent Suicide: Assessment and Intervention*, Berman et al. (2006) list many important elements of a suicide prevention program; these elements as well as recommendations from the Suicide Awareness Voices of Education (SAVE) organization outline key components of a suicide prevention program for teachers. According to Berman et al., as well as the SAVE organization the following elements should be included in a good suicide prevention program for teachers:

- Teachers must be aware of risk factors and warning signs to detect potential for suicide risk.
- Teachers should help students to feel comfortable when seeking assistance.
- Teacher roles in suicide prevention should be clearly defined.
- Teachers should be aware of supportive resources available to them and their students.
- Teachers should know how to make referrals when there are concerns about a potentially suicidal student.
- Teachers should be aware of school policies on suicide prevention and postvention.
- Suicide prevention should be worked into school-wide curriculum.

- A school or district crisis team should be in place to support teachers and to respond to suicide threats.
- Families and the community should be incorporated into the school's suicide prevention plan (Berman et al., 2006; Suicide Awareness Voices of Education, 2007).

Overview of Teachers' Perceptions of Mental Health Roles

In 1995, Burns et al. characterized the school system as the "de facto mental health system for children and adolescence" (p. 147). This growing focus on school-based mental health support places an additional strain on teachers. As teachers have become increasingly responsible for the emotional welfare of their students, some teachers have strongly resisted this trend (Alisic, Bus, Dulack, Pennings, & Splinter, 2012). In one study, teachers were asked to define their roles in situations where students had been exposed to a major emotional trauma. One teacher suggested that teachers should be responsible for teaching academics only and that teaching social and emotional skills should fall on school psychologists and social workers. Some teachers suggested that although they would like to help students struggling after a trauma, they just did not have the time or resources to attend to an individual student's emotional needs and the whole class at the same time (Alisic et al., 2012).

The literature on adolescent suicide prevention has not specifically addressed teachers' perceptions regarding their role in school-based suicide prevention. Similar to teachers' perceptions of working with students after an emotional trauma (Alisic et al., 2012), teachers may also resist or experience discomfort in being a part of suicide prevention efforts. Understanding teachers' perceptions and taking into account these potential barriers are important considerations in developing and strengthening school-based suicide prevention programs.

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APPENDIX B: PILOT SURVEY

Teacher Survey Questions

Your participation is voluntary (no rewards for participating and no negative repercussions for not participating). The survey takes approximately 10 minutes to complete. The following questions assess teachers' perceptions of suicide prevention. The survey is confidential, not tied to identifying information. This information helps school districts prepare suicide prevention training for teachers. Responses will be entered into a data set, analyzed, and summarized. Original surveys will be shredded.

1. _____Your age

1a. Please write in your school district, agency, or private school
_____

2. Gender (**circle your response**): a) Male b) Female

3. Highest completed degree (**circle your response**)
   a) Bachelor's degree
   b) Master's degree
   c) Educational Specialist degree
   d) Doctoral degree

4. _____ What year did you complete your highest degree in education?

5. What kind of classes do you teach? (**circle all that apply**)
   a) General Education Classes
   b) Special Education Classes

6. _____ How many years have you been a teacher, including this year and years worked part time?

7. What kind of school are you currently teaching in? (**circle all that apply**)
   a) Elementary School
   b) Middle School or Junior High
   c) High School
   d) Alternative High School
   e) Other (please explain)_____

8. During your teacher education training did any of your classes or learning activities address suicide prevention in schools? (**circle your response**)
   a) Yes b) No c) Don't remember

9. If yes to the previous question, indicate the type of training or experiences. (**circle <u>all</u> that apply**)

   a) Reading assignment
   b) Role play
   c) Class discussion
   d) Lecture
   e) Practicum experience in schools
   f) Seminar
   g) Video
   h) Other: describe

   _____

10. Do you agree/disagree that teachers should have a role in suicide prevention? (**circle your response**)

    a) strongly disagree **b)** disagree **c)** neither agree not disagree **d)** agree **e)** strongly agree

11. Referring back to question #10, explain your reason for agreeing or disagreeing that teachers should have a role in suicide prevention.

_____
_____
_____
_____
_____

12. As a teacher, do you agree/disagree that you currently have a role in suicide prevention? (**circle your response**)
    a) strongly disagree **b)** disagree **c)** neither agree not disagree **d)** agree **e)** strongly agree

13. If you currently have a role in suicide prevention, please explain that role.

_____
_____
_____
_____

14. Has a student ever told you that they were suicidal? (**circle your response**)
    a) Yes b) No

15. Has a student ever told you a **classmate** was suicidal? (**circle your response**)
    a) Yes b) No

16. I am **comfortable** identifying suicidal students. (**circle your response**)

Disagree very strongly	Disagree strongly	Disagree	Neutral	Agree	Agree strongly	Agree very strongly

17. I am **confident** identifying suicidal students. (**circle your response**)

Disagree very strongly	Disagree strongly	Disagree	Neutral	Agree	Agree strongly	Agree very strongly

18. I am **comfortable** helping a student who has confessed to being suicidal. (**circle your response**)

Disagree very strongly	Disagree strongly	Disagree	Neutral	Agree	Agree strongly	Agree very strongly

19. I am **confident** helping a student who has confessed to being suicidal. (**circle your response**)

Disagree very strongly	Disagree strongly	Disagree	Neutral	Agree	Agree strongly	Agree very strongly

20. Please explain why teachers may feel **uncomfortable** identifying or intervening with a suicidal student.

_____
_____
_____
_____

21. Please explain why teachers may **lack confidence** when identifying or intervening with a suicidal student.

_____
_____
_____
_____

APPENDIX C: FINAL SURVEY

Teacher Survey Questions

1 Please indicate the name of your school district or county school system.

2 _____ Age

3 Gender
- ❍ Male (1)
- ❍ Female (2)

4 Highest completed degree
- ❍ Bachelor's degree (1)
- ❍ Master's degree (2)
- ❍ Educational Specialist degree (3)
- ❍ Doctoral degree (4)

5 _____What year did you complete your highest degree in education?

6 What type of classes do you teach? (you may select more than one)
- ❑ General education (1)
- ❑ Special education (2)

7 How many years have you been a teacher? (including this year and years worked part-time)

8 How many years have you taught adolescents (Grades 7-12)?

9 What grades do you currently teach? (check all that apply)
- ❑ K (1)
- ❑ 1 (2)
- ❑ 2 (3)
- ❑ 3 (4)
- ❑ 4 (5)
- ❑ 5 (6)
- ❑ 6 (7)
- ❑ 7 (8)
- ❑ 8 (9)
- ❑ 9 (10)
- ❑ 10 (11)
- ❑ 11 (12)
- ❑ 12 (13)
- ❑ Other (Please Explain) (14) _____

10 During your teacher training (college or graduate school) did any of your classes or learning activities address suicide prevention in schools?
- Yes (1)
- No (2)
- Don't remember (3)

11 As a teacher have you received suicide prevention training in the last five years?
- Yes (1)
- No (2)
- Don't remember (3)

12 Do you AGREE/DISAGREE with the following statement: Teachers should have a role in suicide prevention.
- Disagree Very Strongly (1)
- Strongly Disagree (2)
- Disagree (3)
- Neither Agree nor Disagree (4)
- Agree (5)
- Strongly Agree (6)
- Agree Very Strongly (7)

13 Do you AGREE/DISAGREE with the following statement: Teacher's major focus should be on academics.
- Disagree Very Strongly (1)
- Disagree Strongly (2)
- Disagree (3)
- Neither Agree nor Disagree (4)
- Agree (5)
- Agree Strongly (6)
- Agree Very Strongly (7)

14 Do you AGREE/DISAGREE with the following statement: Teachers have a responsibility to help their students emotionally.
- Disagree Very Strongly (1)
- Disagree Strongly (2)
- Disagree (3)
- Neither Agree nor Disagree (4)
- Agree (5)
- Agree Strongly (6)
- Agree Very Strongly (7)

15 As a teacher do you AGREE/DISAGREE that you currently have a role in suicide prevention?
- Disagree Very Strongly (1)
- Disagree Strongly (2)
- Disagree (3)
- Neither Agree nor Disagree (4)
- Agree (5)
- Strongly Agree (6)
- Agree Very Strongly (7)

16 As a teacher, which of the following things do you currently do? (check all that apply)
- ☐ Listen for warning signs of suicide in student conversation. (1)
- ☐ Inform students of your availability to talk about suicide and other personal issues. (2)
- ☐ Step in when students are bullied. (3)
- ☐ Act as a member of the school crisis management team. (4)

17 Has a student ever told you that they were suicidal?
- ○ Yes (1)
- ○ No (2)

18 Has a student ever told you a classmate was suicidal?
- ○ Yes (1)
- ○ No (2)

19 I would be comfortable identifying a potentially suicidal student.
- ○ Disagree Very Strongly (1)
- ○ Disagree Strongly (2)
- ○ Disagree (3)
- ○ Neutral (4)
- ○ Agree (5)
- ○ Agree Strongly (6)
- ○ Agree Very Strongly (7)

20 I would be confident identifying a potentially suicidal student.
- ○ Disagree Very Strongly (1)
- ○ Disagree Strongly (2)
- ○ Disagree (3)
- ○ Neutral (4)
- ○ Agree (5)
- ○ Agree Strongly (6)
- ○ Agree Very Strongly (7)

21 I would be comfortable helping a potentially suicidal student.
- ○ Disagree Very Strongly (1)
- ○ Disagree Strongly (2)
- ○ Disagree (3)
- ○ Neutral (4)
- ○ Agree (5)
- ○ Agree Strongly (6)
- ○ Agree Very Strongly (7)

22 I would be confident helping a potentially suicidal student.
- ○ Disagree Very Strongly (1)
- ○ Disagree Strongly (2)
- ○ Disagree (3)
- ○ Neutral (4)
- ○ Agree (5)
- ○ Agree Strongly (6)
- ○ Agree Very Strongly (7)

23 Teachers may be uncomfortable helping and identifying suicidal students because they lack the appropriate training.

- ❍ Disagree Very Strongly (1)
- ❍ Disagree Strongly (2)
- ❍ Disagree (3)
- ❍ Neutral (4)
- ❍ Agree (5)
- ❍ Agree Strongly (6)
- ❍ Agree Very Strongly (7)

24 Teachers may be uncomfortable helping suicidal students for fear of making the situation worse.

- ❍ Disagree Very Strongly (1)
- ❍ Disagree Strongly (2)
- ❍ Disagree (3)
- ❍ Neutral (4)
- ❍ Agree (5)
- ❍ Agree Strongly (6)
- ❍ Agree Very Strongly (7)

25 Teachers may be uncomfortable identifying and helping suicidal students because they fear legal repercussion.

- ❍ Disagree Very Strongly (1)
- ❍ Disagree Strongly (2)
- ❍ Disagree (3)
- ❍ Neutral (4)
- ❍ Agree (5)
- ❍ Agree Strongly (6)
- ❍ Agree Very Strongly (7)