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Adolescent Attitudes Toward and Perceptions of Suicide, Stigma, and Help-Seeking Behavior

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Philadelphia College of Osteopathic Medicine

Department of Psychology

ADOLESCENT ATTITUDES TOWARD AND PERCEPTIONS OF SUICIDE,
STIGMA, AND HELP-SEEKING BEHAVIOR

By Julia M. Hollinger

Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Psychology

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DEPARTMENT OF PSYCHOLOGY**

Dissertation Approval

This is to certify that the thesis presented to us by Julia Hollinger
on the 22nd day of February, 2016, in partial fulfillment of the
requirements for the degree of Doctor of Psychology, has been examined and is
acceptable in both scholarship and literary quality.

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Dedication

For Dad

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Abstract

Suicide is a leading cause of death for adolescents and represents a major national health concern (American Foundation for Suicide Prevention, [AFSP], 2015; (Centers for Disease Control [CDC], 2013). Because adolescents spend the majority of their day at school (Erbacher, Singer, & Poland, 2015), the effectiveness of school-based suicide prevention programs may be improved through better understanding of adolescents' views on the subject of suicide and the factors that may influence participation in prevention efforts. The present study explored the attitudes and perceptions of seventh grade students from a suburban middle school in Pennsylvania, using archival survey data. Variables that were examined included attitudes toward suicide, real or perceived stigma toward suicide, suicide literacy, and attitudes toward help-seeking for suicidal thoughts and behaviors. Results indicated that an overwhelming majority of participants believe that suicide can be prevented and that intervention is necessary; however, adolescents still hold some degree of stigmatizing attitudes toward suicide and are uncertain about how to identify and assist those at risk. There were few significant differences between the perceptions and attitudes of males and females on this topic. The results confirm the need for school-based suicide prevention education, with specific focus on identification of warning signs and on ways to intervene when concerns for self or a peer arises. More importantly, the results emphasize the need to implement school-based suicide prevention education programs much earlier than what is considered typical. Limitations to the study and directions for future research are also discussed.

Keywords: suicide, suicide stigma, suicide prevention, help-seeking, adolescent suicide, school-based suicide prevention program

Table of Contents

Dedication	iii
Acknowledgements.....	iv
Abstract.....	v
Table of Contents	vi
List of Tables	ix
 Chapter 1: Introduction	
Introduction.....	1
Statement of the Problem.....	4
Purpose of the Study	6
 Chapter 2: Review of the Literature	
Introduction.....	8
Role of the Schools in Suicide Prevention.....	9
Universal Interventions	10
Selected Interventions	10
Liability	10
Pennsylvania Act 71	12
Adolescent Suicide Literacy	12
School-Based Suicide Prevention Programs.....	14
Signs of Suicide (SOS)	15
Linking Education and Awareness of Depression and Suicide (LEADS)	16
Surviving the Teens Depression and Awareness Suicide Prevention Program.....	17

LifeLines	18
Aevidum.....	18
Summary of Programs	19
Attitudes and Stigma Toward Suicide	21
Attitudes and Stigma Toward Help-Seeking	25
Attitudes and Stigma Toward School-Based Suicide Prevention Efforts.....	27
Summary and Research Questions.....	30
Chapter 3: Method	
Data Source	34
Setting	34
Racial/Ethnic Makeup.....	35
Measures and Materials	36
Procedure	38
Data Analysis	40
Chapter 4: Results	
Descriptive Statistics.....	41
Research Question 1	41
Research Sub-question 1	44
Research Question 2	46
Research Question 3	49
Research Question 4	51
Chapter 5: Discussion	

Summary and Significance of the Findings	60
Research Question 1	60
Research Sub-question 1	61
Research Question 2	62
Research Question 3	63
Research Question 4	65
Impact for Schools	66
Local Impact	68
Limitations	69
Future Directions	70
References	72
Appendices	82

List of Tables

Table 4.1 <i>Demographic Information</i>	41
Table 4.2 <i>Descriptive Statistics for Survey Items Corresponding to RQ 1</i>	43
Table 4.3 <i>Frequency of Responses for Survey Items Corresponding to RQ 1</i>	44
Table 4.4 <i>Descriptive Statistics for Survey Items Corresponding to RQ Sub 1</i>	46
Table 4.5 <i>Frequency of Responses for Survey Items Corresponding to RQ Sub 1</i>	46
Table 4.6 <i>Descriptive Statistics for Survey Items Corresponding to RQ 2</i>	48
Table 4.7 <i>Frequency of Responses for Survey Items Corresponding to RQ 2</i>	49
Table 4.8 <i>Descriptive Statistics for Survey Items Corresponding to RQ 3</i>	50
Table 4.9 <i>Frequency of Responses for Survey Items Corresponding to RQ 3</i>	51
Table 4.10 <i>Frequency of Responses for Survey Item 29</i>	51
Table 4.11 <i>Descriptive Statistics for All Survey Items by Gender</i>	52
Table 4.12 <i>One-Way Analysis (ANOVA) for Gender</i>	56

Chapter 1: Introduction

Introduction

Suicide is a major public health problem in the United States; most recent available data find that a suicide completion occurs every 12.8 minutes (CDC, 2013). Nationally, suicide is the second leading cause of death for youth aged 10-24 (CDC, 2013). The latest statistics amassed from the National Youth Risk Behavior Surveillance (YRBS) in 2013 found that 17% of students seriously considered attempting suicide in the previous 12 months and nearly 14% of students made a plan about how they would attempt suicide in the previous 12 months. Moreover, 8% of students attempted suicide one or more times in the previous 12 months (CDC, 2013). All of these data represent an increase since the last YRBS in 2011.

Suicidal behavior generally refers to ideations, communications, and behaviors that involve some degree of intent to die (Van Orden et al., 2010). Adolescents who struggle with suicidal thinking or behavior often exhibit unhealthy thought patterns due to mental health issues such as depression (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012). Thoughts of hopelessness, helplessness, and worthlessness are common thought distortions associated with suicidal behavior (SAMHSA, 2012). This can lead to significant school-based impairment (Klein, Kujawa, Black, & Pennock, 2013). Symptoms that may be readily observed in the school setting include an inability to concentrate, to think rationally, or make even minor decisions; other observable symptoms include difficulty getting necessary things done, self-harm behavior, withdrawing from normal relationships or isolating oneself, and increased absenteeism in school (Klein et al., 2013). Such problems may be reflected in students'

classroom behavior, homework habits, and academic performance (AAS, 2010b; American Psychiatric Association [APA], 2013; Huberty, 2006). Clearly, suicide is a phenomenon that should be of particular concern to those in the educational system (Lam, 2014), yet currently, little is known about why those at risk of suicide do not seek help (Calear, Batterham, & Christensen, 2014; Pandey, 2013).

The current study seeks to answer the question of why students do not seek help. This study utilizes data collected from students participating in a typical seventh grade health curriculum. Seventh grade students were chosen to participate in the study as this is the grade in which a mental health curriculum is first introduced as part of the mandatory health course. It should be noted that suicide is not comprehensively covered in a typical seventh grade curriculum (S. Payne, personal communication, May 19, 2015); students do not receive curricular exposure to suicide until ninth grade or later (depending on when high school students elect to take their mandatory health courses). The seventh grade curriculum covers three broad areas of health: Mental/Emotional Health, Social Health, and Mind/Body Connection. According to the curriculum, mental health refers to one's ability to solve problems and handle daily events. Good mental health involves having an alert mind, being able to learn from mistakes, and recognizing personal achievements. Emotional health involves identifying feelings, such as happiness, sadness, and anger. The curriculum teaches practicing good mental/emotional health by understanding strengths and weaknesses, managing stress, taking behavioral responsibility, and appropriately expressing feelings. Social health is defined as how one relates to people in all aspects of his or her life. Practicing good social health includes showing care for others, proving trustworthiness and honesty and building strong

connections with others. Last, the mind/body connection refers to how emotions affect physical and overall health and vice versa (S. Payne, personal communication, May 19, 2015). These topics are of utmost importance to teach to students at this particular time in their development. However, it is more than concerning that suicide is not addressed directly, especially considering that suicide is a leading cause of death for students in this age group (AFSP, 2015; CDC, 2013).

Suicidal behavior is often the result of an interaction between and among many factors, and there is a need to integrate support across the life of a child (Erbacher et al., 2015). Primary risk factors for suicide include history of suicide attempt, family history of suicide, and/or a mental health diagnosis, such as depression (CDC, 2012). An individual's risk of suicide increases by 20% if he or she is diagnosed with a depressive disorder (AAS, 2010a). Other risk factors for suicide include family conflict, abuse or trauma, substance abuse, lack of social support, and unsuccessful attempts to access mental health services (CDC, 2012). Risk factors more closely associated with adolescence may include problems with the law, break-up with a significant other, bullying or victimization, academic crisis or school failure, or forced or extended separation from friends or family (Leiberman, Poland, & Cowan, 2006). Conversely, protective factors are those factors which decrease an individual's risk for suicide. These include access to mental health services and intervention, a strong family and social support system, positive coping skills and problem-solving skills (CDC, 2012).

The school environment can help reduce risk for suicide for students by providing a positive instructional climate, as well as caring and support from teachers and staff (Suicide Prevention Resource Center [SPRC], 2012). School may one of the few positive

social connections for students (SPRC, 2012). Knowing that help is available, including within the school setting, may go a long way in preventing youth suicide. However, “We have not yet gotten to the point where we can expect that sharing thoughts of suicide, disclosing a suicide attempt, or mentioning that a loved one has died by suicide will be met with care and compassion” (Erbacher et al., 2015, p.16). There still persists stigmatizing attitudes toward suicide that may impact adolescents’ perceptions of individuals struggling to manage suicidal thoughts or behavior as well as attitudes toward seeking help for self or others for suicidal thoughts or behavior.

Statement of the Problem

Considering that suicide is a completely preventable problem (Batterham, Calear & Christensen, 2013a; National Research Council, 2002), it appears that current prevention efforts have not been maximally effective. In Pennsylvania, suicide is the leading cause of death for youth ages 10-14 (AFSP, 2015). Included in this age group is the target population for the current study. Although little is known about the reasons why those at risk do not seek assistance (Calear et al., 2014; Pandey, 2013), some recent research suggests that suicide and related behaviors are heavily stigmatized and that public attitudes toward suicide and mental illness in general may decrease the likelihood of help-seeking behavior (Batterham, Calear & Christensen, 2013b; Calear et al., 2014). More specifically, research in the area of youth suicide, help-seeking, and school-based suicide prevention efforts has shown that there still exists a severe stigma around suicide and that this stigmatization significantly hinders adolescents’ willingness to seek help or take advantage of school-based support services or prevention resources (Barney, Griffiths, Jorm, & Christensen, 2006; Batterham et al., 2013a; Calear et al., 2014;

Gilchrist & Sullivan, 2006; Moskos, Olson, Halbern, & Gray, 2007; Sudak, Maxim, & Carpenter, 2008; Vogel, Wade, & Hackler, 2007). Although preliminary research suggests that stigma surrounding suicide reduces help-seeking behaviors, there exists a need for more targeted research with adolescents in the area of stigmatization of suicide, how it is created, and the ways in which stigma may act as a barrier to help-seeking and to preventative measures in order to increase the opportunity for school-based suicide prevention efforts to be successful (Buda, 2010; Curtis, 2010; Pouliot & de Leo, 2006).

The current study holds much promise to contribute to the growing body of research in the areas of adolescent attitudes toward suicide, suicide stigma, and help-seeking for self and others. It directly addresses the goal of increasing help-seeking behaviors for at-risk individuals by decreasing stigma as outlined in the National Action Alliance for Suicide Prevention's Research Prioritization Task Force's 2014 research agenda (Niederkröthaler, Reidenberg, Till, & Gould, 2014). The National Action Alliance for Suicide Prevention's Research Prioritization Task Force was charged with conducting a targeted literature review, analyzing the effects of potential suicide interventions, and gathering stakeholder input through repeated surveys. The research agenda that the Task Force developed outlines the research areas that show the greatest promise in helping to reduce the rates of suicide attempts and completions over the next 5-10 years (Action Alliance for Suicide Prevention [AASP], 2015). In addition, it has been suggested that further research into suicidal behavior and suicide prevention initiatives be conducted with regard to assessing the extent to which suicide stigma is a barrier to help seeking (Batterham et al., 2013b). The benefits of the current study include contributing toward the advancement of suicide prevention with the adolescent

population, for which suicide continues to be a leading cause of death. Benefits also include the opportunity to contribute toward the development of school-wide suicide prevention efforts with the goal of increasing success rates of such programs. Last, the outcome of this study will likely yield information which can be used to develop effective school-wide suicide prevention efforts specific to the district site used for data collection and help the district align its current efforts with Act 71 (PA Suicide Prevention Law) requirements (discussed in more detail in review of the literature).

Purpose of the Study

The purpose of this quantitative archival study is to explore the perceptions and attitudes of adolescents toward suicide and real or perceived stigmatization of suicide as well as help-seeking behavior. Differentiation between real stigma and perceived stigma is included in recognition that not all instances of stigmatization are grounded in reality and students' perceptions of others' feelings toward them play a very real role in how they, themselves, feel. Research has demonstrated that perception of stigma is a key factor in adolescents' willingness to seek help from others. One study examined youth perceptions of suicide and help-seeking with university students aged 18-24 through surveys as well as through interviews. The survey questions involved themes of support service awareness and on attitudes, personal experience with suicidal thoughts or behaviors, and on mental-health promotion awareness. One participant commented, "Imagine if someone found out or they told your parents [you sought help from a counselor]...your friends would think you were mental." (Curtis, 2010, p. 709).

The current study aims to help facilitate increased effectiveness of school-based suicide prevention programs through better understanding of adolescents' views on the

subject of suicide and the factors that may impede participation in prevention efforts. Prior research in this area suggests that stigma, fear of being perceived as weak, and fear of being judged by peers for seeking help for mental health issues, including suicidal thoughts or behaviors may be potential barriers to help-seeking (Gilchrist & Sullivan, 2006). Archival data from a survey examining attitudes and perceptions of 208 seventh grade students from a suburban Pennsylvania middle school was used for analysis in the current study. Variables that were examined included attitudes toward suicide, real or perceived stigma toward suicide, suicide literacy, as well as attitudes toward school-based suicide prevention programs and help-seeking for suicidal thoughts and behaviors.

Chapter 2: Review of the Literature

Introduction

Suicide is a leading cause of death for adolescents, with eleven youth completing suicide in the United States every day (Drapeau & McIntosh, 2015). Suicide has claimed more adolescent lives over the past decade than cancer, heart disease, HIV/AIDS, congenital birth defects, diabetes, and other medical conditions combined (Miller, Eckert, & Mazza, 2009). It is a serious national health problem that merits attention, particularly from those in the field of education as school is the place where youth spend the majority of their waking hours (Erbacher et al., 2015; Lam, 2014). Unfortunately, suicide and related behaviors are heavily stigmatized. A review of the current research regarding stigma and suicide found that stigmatization of mental illness has decreased slightly over time, but that the stigma surrounding suicide remains widespread (Sudak et al., 2008). This stigmatization negatively affects adolescents' inclinations to seek help and to take advantage of prevention resources offered in school (Barney et al., 2006; Batterham et al., 2013a; Calear et al., 2014; Gilchrist & Sullivan, 2006; Moskos et al., 2007; Sudak et al., 2008; Vogel et al., 2007). Therefore, it is worth investigating, in depth, the ways in which this stigma may act as a barrier to preventative measures in order to increase the opportunity for school-based suicide prevention efforts to be successful (Buda, 2010; Curtis, 2010; Pouliot & de Leo, 2006).

The following is a review of the literature that examines adolescent attitudes toward suicide, stigma, help-seeking, and school-based prevention efforts, including programs and activities offered by or available through schools. Discussion of related

factors, such as suicide literacy, and a review of existing evidenced-based school suicide prevention programs are also included.

Role of Schools in Suicide Prevention

Suicide is a leading cause of death for adolescents; therefore, prevention of youth suicide should occur in the place where adolescents spend the majority of their day- at school (Erbacher et al., 2015). Schools can and should be a focal point for prevention and intervention efforts for mental health issues and suicidal behavior in adolescents as students are constantly observed by and come into contact with many skilled and well-educated professionals (Azrak & Kelly, 2009; Cash, 2004). In fact, it is most often a school-based individual who identifies a youth at-risk for suicide (Erbacher et al., 2015). Prevention can be initially facilitated by creating a caring and supportive school environment for children where they feel safe and comfortable in sharing concerns (Cash, 2004; Erbacher et al., 2015).

Effective school-wide suicide prevention may be achieved by using a number of complementary strategies, including developing protocols for identifying and helping students at risk for suicide and by providing suicide education to students and staff to increase suicide literacy and awareness. Other strategies should include training of key school personnel, including school mental health professionals to intervene with students at risk for suicide, conducting suicide risk assessments, providing recommendations and referrals to community services, and following up with support at school (Erbacher et al., 2015). Working with suicidal youth requires that educators are literate about suicide and about what they can do to help these students (Huberty, 2006). Schools may choose to

utilize the expertise of mental health professionals in the school in planning prevention and intervention, as well as in training others (Cash, 2004).

Universal Interventions. A comprehensive school-based suicide protocol should include a tiered system of intervention. Universal interventions emphasize skills in self-awareness, communication, problem solving, coping, decision making, relationship building, stress management, and knowledge of health issues and resources (Zenere & Lazarus, 2009). These types of interventions also serve to mitigate risk factors and to promote protective factors within the school setting. Cross-education with school-based prevention curricula could exist, during which students are taught to identify signs and behaviors associated with suicide risks in themselves and others and to take appropriate action in gaining adult assistance (Zenere & Lazarus, 2009). Suicide screening programs can also serve as a universal intervention that can help to identify those students at greater risk for suicide.

Selected Interventions. Selected interventions are implemented with students who may represent a suicide risk. Students may be identified and referred by teachers who receive training and education in identifying warning signs of suicide risk. Selected interventions could include referral to a Student Assistance Program, individual or group counseling, development of a student suicide safety plan, or referral to community-based mental health services (Zenere & Lazarus, 2009).

Liability. Liability for schools with regard to suicide is a complex issue (Erbacher et al. 2015). There have been a number of court cases in which legal action has been taken against schools following the suicide of a student, but there is not yet a standard legal precedent for such cases (Erbacher et al. 2015). However, there are several best

practice standards to which school districts should try to adhere in order to avoid litigation. These include keeping accurate documentation of interactions with potentially suicidal students; providing mandatory crisis training and suicide prevention training to all school personnel; and implementing suicide prevention tools and appropriate intervention responses in accordance with district policy. More specifically, performing a suicide risk assessment, notifying the parent or guardian, increasing supervision, and documenting interactions are crucial steps in working with an at-risk or potentially suicidal student (Erbacher et al. 2015). In short, schools should do everything possible to prevent a suicide from occurring (Erbacher et al. 2015).

Although many schools are still hesitant to assume a leadership role in suicide prevention (Erbacher et al., 2015), it is essential that they do so. It is estimated that nearly 90% of adolescents who complete suicide have a diagnosable and/or treatable mental disorder and that more than 50% of these teens have major depression (King, Strunk, & Sorter, 2011). Almost two-thirds of individuals that complete suicide demonstrate clinical symptoms for more than a year before their deaths (Azrak & Kelly, 2009). School professionals are encouraged to try to develop a working and collaborative relationship with students, using positive approaches and providing opportunities for success (Huberty, 2006). They could be potentially life-saving connections for youth experiencing suicidal thoughts or behaviors (Erbacher et al., 2015). If warning signs of mental health issues, and by extension, suicide, could be recognized and acted upon in the school setting through timely, accurate, and effective intervention, adolescent suicidal behavior may be able to be prevented or significantly reduced (Suicide Prevention Resource Center [SPRC], 2012).

Pennsylvania Act 71: Youth Suicide Awareness and Prevention. Even the legislature is recognizing the critical role schools play in youth suicide prevention. In 2014, Pennsylvania signed into law Act 71, which requires public school entities to adopt a youth suicide awareness and prevention policy and to provide continuing professional development in youth suicide awareness and prevention for professional educators serving students in grades 6-12. The policy must include components such as methods of prevention; procedures for early identification and referral of students at risk for suicide; methods of intervention for students at-risk for suicide; methods of responding to a student or staff suicide attempt; reporting and documentation procedures; and resources on youth suicide awareness and prevention (Pennsylvania Department of Education [PDE], 2015). Parents must be made aware of the school entity's policy. Training programs for staff should include relevant information related to early identification and referral, including risk factors and warning signs; intervention, including assessment and screening and methods for community support and outreach. School professionals serving grades 6-12 must receive four hours of training every five years in order to stay in compliance with the law (PDE, 2015) Therefore, the goal of Act 71 is to

Ensure that all Pennsylvania educators are equipped with the skills and confidence to recognize when students may be at risk and to refer those students for additional help, and that students are empowered to seek help when they notice signs of mental illness or suicide in themselves or their peers. (AFSP, 2014)

Adolescent Suicide Literacy. Student educational initiatives which aim to increase awareness of suicide can play a significant role in reducing risk for suicide

(Substance Abuse and Mental Health Services Administration [SAMSHA], 2012).

Research has demonstrated that adolescents are indeed willing to learn, to be educated and to be made aware, and to provide support to their peers with regard to suicide prevention (Cigularov, Chen, Thurber, & Stallones, 2008; Walker, Ashby, Hoskins, & Greene, 2009). This is an important finding because knowledge about suicide plays a vital role in the help-seeking process. One study found that a high level of suicide literacy (knowledge about causes, risk factors, symptoms, treatment, etc.), combined with low stigma may positively influence help-seeking behaviors for individuals experiencing suicidal ideation (Batterham et al., 2013a). Another study examining the connection between suicide literacy, stigma and help-seeking found that stigma toward individuals who complete suicide as well as poor suicide literacy were significantly correlated with poorer attitudes toward help-seeking and reduced help-seeking behavior (Calear et al., 2014). In addition, the findings indicated that programs designed to increase knowledge of suicide and reduce stigmatizing attitudes toward individuals who complete suicide may improve the likelihood of enlisting help for suicidal thoughts and behaviors (Calear et al., 2014).

There is evidence to suggest that school-based suicide prevention programs are effective in improving student knowledge and attitudes toward suicide (Calear et al., 2014; Cusimano & Sameem, 2011). One study which analyzed the studies of eight existing school-based prevention programs found statistically significant improvements in suicide knowledge in five of the eight included studies (Cusimano & Sameem, 2011). Of the seven studies that assessed attitudes toward suicide, five studies indicated statistically significant improvement in attitude toward suicide and depression (Cusimano

& Sameem, 2011). These findings underscore the importance of enhancing adolescent knowledge of and attitudes toward suicide in order to facilitate help-seeking behavior (Calear et al., 2014; Cusimano & Sameem, 2011). Unfortunately, however, a high level of suicide literacy does not necessarily translate into less negative attitudes toward individuals who die by suicide or to less judgement of one's own suicidal thoughts and behaviors (Batterham et al., 2013a).

School-Based Suicide Prevention Programs. Despite increased suicide prevention efforts, it is still clearly a significant public health problem that warrants attention not only from policymakers, but also from those interacting with students on a daily basis. Because adolescents spend such a large percentage of each day in school, it represents a natural setting in which to implement prevention and intervention efforts designed to address adolescent suicidal behavior (King et al., 2011). In particular, the school environment can help reduce suicide risk for students by providing a positive instructional climate as well as caring and support from teachers and staff (SPRC, 2012).

There are a number school-based suicide prevention programs that aim not only to increase knowledge and awareness (suicide literacy), but also to teach specific skills and increase self-efficacy in students. Such programs may have a significant impact on students' attitudes toward suicide and help-seeking for themselves and others (King et al., 2011). The National Registry of Evidence-Based Programs and Practices (NREPP) is a searchable online database of interventions that have demonstrated effectiveness in the prevention or treatment of mental health and substance abuse disorders. The NREPP includes evidence-based interventions that address suicide. Summary reports generated for NREPP interventions include general information about the intervention, a

description of the research outcomes reviewed, and ratings for quality of research and readiness for dissemination (SAMHSA, 2015). A discussion of several widely-used programs, some of which can be found on the NREPP, follows. This does not, however, represent an exhaustive list of all available programs.

Signs of Suicide (SOS). Signs of Suicide (SOS) is a secondary school-based prevention program developed by the non-for-profit organization, Screening for Mental Health, Incorporated. SOS combines a suicide awareness and education curriculum with a screening measure for depression and other risk factors associated with suicidal behavior. The program focuses on two prominent risk factors for suicide: underlying mental health issues, particularly depression, and substance abuse. The program's primary objectives are to teach adolescents to recognize the warning signs of depression and suicide in themselves and others and to respond, using the SOS technique of Acknowledge, Care, and Tell (ACT). SOS attempts to prevent suicide attempts, to increase knowledge about suicide and depression, to facilitate less negative or stigmatizing toward suicide and depression, and to increase help-seeking behavior among adolescents (SAMHSA, 2015). Randomized controlled trials evaluating the effectiveness of the Signs of Suicide Program have demonstrated reduced suicide attempts, increased knowledge of suicide and depression, and fewer negative or stigmatizing attitudes toward suicide, depression, and help-seeking (Aseltine & DeMartino, 2004; Aseltine, Schilling, James, & Glanovsky, 2007). A new study evaluating the effects of SOS with middle school students found that children who participated in the program were significantly more knowledgeable about suicide and depression than those students who did not participate. In addition, students who reported suicidal ideation prior to participating in

SOS were significantly less likely to report suicidal ideation, planning, or attempts three months after participating in the program, as compared with those students with prior suicidal ideation who did not participate in the program (Schilling, Lawless, Buchanan, & Aseltine, 2014). However, SOS has not been shown to be effective in increasing help-seeking behaviors (Katz et al., 2013; Schilling et al., 2014). SOS is included on the NREPP (SAMHSA, 2015).

LEADS: For Youth (Linking Education and Awareness of Depression and Suicide). LEADS: For Youth (Linking Education and Awareness of Depression and Suicide) is a curriculum for secondary students that is designed to increase knowledge of depression and suicide, reform perceptions of depression and suicide, increase awareness of suicide prevention resources, and increase help-seeking behaviors. The curriculum addresses the symptoms of depression, their links to suicide, risk and protective factors for suicide, warning signs of suicide, and seeking help using school and community resources. The goal of the program is to empower students to seek help for themselves or others using the resources available to them (SAMHSA, 2015).

A study that compared students who received LEADS with students who did not receive the intervention found that a significantly higher percentage of students in the intervention group, as compared with those in the control group, correctly answered questions pertaining to knowledge of suicide and depression (for example, "Having a family history of depression increases someone's risk of depression and/or suicide."). In addition, results from the study indicated fewer negative and stigmatizing attitudes toward suicide and depression. The results also indicated an increased ability to identify suicide prevention resources for those students receiving the intervention, as compared

with the control group (Leite, Idzelis, Reidenberg, Roggenbaum, & LeBlanc, 2011).

LEADS is included on the NREPP (SAMHSA, 2015).

Surviving the Teens Depression Awareness and Suicide Prevention Program.

The major focus of the Surviving the Teens Depression Awareness and Suicide Prevention Program is on teaching students adaptive coping skills, how to recognize depression and suicidal behaviors in oneself and others, and how to help individuals or friends who are depressed. Depression and substance abuse are discussed in detail, along with other mental health disorders. Students are also taught ways to connect and communicate more effectively with family members, anger management strategies, and conflict resolution skills, with opportunities to practice the learned skills throughout the program. Although the program is considered a universal intervention, it does target adolescents within the curriculum group who are at current risk for suicide, and it offers these students tools they can use either presently or in the future to cope with depression or suicidal ideation (King et al., 2011).

One study of over 1,000 participants examined the effect of this program on adolescents' suicidality. Participants were administered a pretest, immediate posttest, and delayed posttest three months later to assess attitudes, self-efficacy, and behavioral intentions for help-seeking, including behaviors regarding suicide. The results indicated significant self-reported behavioral changes (not just changes in attitude or increased knowledge) at the three-month follow-up, including decreased suicidal ideation, planning, and attempts. Increased help-seeking behaviors for self and others were also indicated. Nearly 90% of participants felt the program should be offered to all high school students (King et al., 2011).

LifeLines. Lifelines is a comprehensive, school-wide suicide prevention curriculum for middle and high school students. The focus of the program is on promoting a caring school environment in which seeking help is encouraged and in which it is recognized that suicidal ideation and behaviors require disclosure so that help can be extended. Increasing recognition of at-risk students, providing appropriate initial contact, and taking action to obtain help are the main objectives of the program. In addition to the curriculum for students, LifeLines includes suicide awareness training for school staff, as well as a parent workshop (SAMHSA, 2015).

Results from an experimental study revealed that students who received the LifeLines intervention demonstrated a significantly greater increase in knowledge about suicide, as compared with those students who did not receive the intervention. The intervention group also demonstrated significantly greater improvement in attitudes about suicide, suicide intervention, and seeking help from an adult, as compared with the control group. Finally, students who participated the LifeLines curriculum were less willing to keeping a peer's suicidal ideation a secret, as compared with those students who did not participate in the curriculum (Kalafat, Madden, Haley, & O'Halloran, 2007). The LifeLines curriculum is included on the NREPP (SAMHSA, 2015).

Aevidum. Aevidum began at Cocalico High School in Lancaster County, Pennsylvania after a student had completed suicide. Derived from Latin roots, "aevidum" means "I've got your back." This idea is used to create positive mental health environments where all students feel accepted, appreciated, acknowledged, and cared for in schools and communities. Consistent with the belief that adolescents are willing to provide support to their peers, the Aevidum message of openness, connectivity, and

sensitivity in dealing with suicide and depression is delivered creatively through a series of student-generated activities. The student-driven Aavidum program emphasizes the relationships between students and their peers and the relationships between students and trusted adults as being essential to the effectiveness of the program. These relationships are cultivated through a variety of activities that center on the broad goal of creating healthy and safe schools. According to the Aavidum philosophy, “A healthy school is a place where students...truly ‘have each other’s backs!’” (Aavidum, 2014). However, adults also have an important role to play. Adults participating in Aavidum, including teachers, staff, parents, and community members, are expected to support and understand issues affecting teens, be available as a trusted adult when a student is struggling or needs to refer a struggling friend, and have each student's back by getting him/her to an adult who can help (Aavidum, 2014).

Summary of Programs. Although these types of programs show great promise in furthering the goal of schools to reduce the risk of youth suicide, most suicide prevention programs aimed at adolescents do not adequately address essential factors that may negatively influence their success. Such factors may include lack of awareness of suicidal thoughts or behaviors of others, negative experiences with previous preventative measures, reluctance to seek help for interpersonal problems, and the stigmatization of suicide in particular (Curtis, 2010). Whether or not school-based programs lead to behavior change in adolescents with regard to help seeking is unclear (Joshi, Hartley, Kessler, & Barstead, 2015). One systematic review of studies investigating the impact of youth suicide prevention programming on help-seeking found little to no evidence in favor of existing prevention efforts positively affecting students’ help-seeking attitudes

and behaviors, despite help-seeking being a critical link between problem recognition and receiving necessary mental health support and intervention (Klimes-Dougan, Klingbeil, & Meller, 2013). It is of greater concern, as the review indicated, that at-risk adolescents are the least likely to seek help (Klimes-Dougan et al., 2013).

Another comprehensive review examined thirteen school-based suicide prevention programs, including universal interventions as well as selected interventions such as Signs of Suicide, from a public health perspective. These studies were selected for review and were analyzed using the criteria of the Task Force on Evidence-Based Interventions in School Psychology Procedural and Coding Manual (Kratochwill & Stoiber, 2002). These criteria include eight methodological indicators: Measurement, comparison group, statistically significant outcomes, educational/clinical significance, identifiable components, implementation fidelity, replication, and site of implementation. For all selected studies, each of these key factors were coded on a 4-point scale of evidence (where a score of “0” equals no evidence and a score of “4” equals strong evidence) and then averaged to provide a mean methodology rating for each study (Miller et al., 2009). The results revealed that only two of the thirteen studies reviewed offered strong evidence for statistically significant outcomes, such as reduced suicide attempts or improved knowledge and attitudes toward suicide and depression (Miller et al., 2009). Even less encouraging is the fact that only one study showed strong evidence for educational/clinical significance.

A more recent comprehensive and systematic review of the empirical literature on school-based suicide prevention programs used 60 abstracts pertaining to school-based suicide prevention programs and rated each study for level of evidence and gave a grade

of recommendation using criteria established by the Oxford Centre for Evidence Based Medicine (Katz et al., 2013). Results indicated that few programs have been evaluated for their effectiveness in reducing suicide attempts. There may be a variety of reasons for this, including the fact that attempting suicide is a low base rate behavior and many attempts are not reported and are, therefore, not part of the available data, making evaluation difficult (Erbacher et al., 2015). More often, evaluation focuses on a program's ability to improve student and school staff knowledge and attitudes toward suicide. Based on these reviews, suicide prevention program implementation may best be guided by examining the literature on prevention of other socioemotional and behavioral issues as the relationship of suicide to these other types of problems is well documented (Miller et al., 2009). Moreover, the overall effectiveness of such programs may be optimally realized when efforts are able to increase the number of students who seek help (Klimes-Dougan et al., 2013).

Attitudes and Stigma Toward Suicide

Attitudes toward suicide and suicidal behaviors appear to play an integral role in the creation of stigma (Arnautovska & Grad, 2010). School-based suicide prevention efforts are only as successful as the school culture allows them to be, and students who have either real or perceived stigma toward suicide may be reluctant to participate in such efforts for fear of being associated with the phenomenon of suicide. In a study aimed at examining the attitudes of adolescents toward suicide using the Questionnaire on Attitudes Toward Suicide ([ATTS] Salander-Renberg & Jacobsson, 2006), an explorative factor analysis extracted six factors related to attitudes and beliefs about suicide. The six factors analyzed included *preventability*, the idea that suicide can and must be prevented;

incomprehensibility, the idea that suicide cannot be justified or understood; *avoidance of discussion*, the idea that talking about suicide triggers suicidal thoughts; *unpredictability*, the idea that suicide occurs without warning; *loneliness and appeal*, referring to loneliness as the cause of suicide and the idea that a suicide attempt is an appeal for help; and *permissiveness*, referring to tolerance of suicide as a basic human right, and *acceptance* of suicide in extenuating circumstances. The study focused primarily on this last factor of permissiveness. The findings confirmed that a permissive attitude toward suicide was positively associated with the majority of the identified risk factors for suicide, including engaging in any type of suicidal behavior (Arnautovska & Grad, 2010).

Other research examining the relationship between acceptability of suicide and suicide planning with youth aged 14-22 years has confirmed that adolescent attitudes toward suicide are strongly related to suicidal behavior and ideation. Adolescents who reported high suicide acceptance levels were significantly more likely to report thinking about dying by suicide than were those who did not (Joe, Romer, & Jamieson, 2007). The study also found a very strong association between suicide acceptance and planning. Participants who reported the greatest acceptance of suicide were more than fourteen times more likely to form a suicide plan, as compared with participants who reported the least acceptance of suicide (Joe et al., 2007). These results may imply that a more permissive and accepting attitude toward suicide may be a significant risk factor for suicidal behavior (Arnautovska & Grad, 2010; Joe et al., 2007). This must be taken into consideration when attempting to reduce the stigma surrounding suicide.

More recent literature continues to support this idea. One study evaluated possible risk factors associated with suicide stigma and sought to identify populations

that hold stigmatizing attitudes toward suicide and related behaviors, using a brief scale designed to assess the stigma of suicide, the Stigma of Suicide Scale ([SOSS], 2013) (Batterham et al., 2013a). Participants were 1,286 adults living in Australia, who completed the short-form version of the SOSS via online survey. The SOSS uses a 5-point Likert scale to rate a comprehensive range of descriptors that could be used to describe an individual who completes suicide. Examples of descriptors include “cowardly”, “irresponsible”, “brave”, “understandable”, “stupid”, and “dedicated.” The SOSS descriptors assess three primary factors: Stigma, Isolation/Depression, and Glorification/Normalization. Results revealed that the Isolation subscale items had the highest endorsement by participants. Descriptors comprising this subscale of individuals who die by suicide include such terms “isolated”, “lonely”, and “lost”. Approximately 25% of respondents endorsed “irresponsible” and “cowardly” as descriptors of individuals who complete suicide (Batterham et al., 2013a). Nearly three-quarters of participants agreed or strongly agreed that individuals who complete suicide are “disconnected”. However, nearly 9% felt that individuals who complete suicide are “pathetic” and 14% felt that individuals who complete suicide are “stupid.” (Batterham et al., 2013a).

In addition, mental health measures were also administered to participants to assess the presence of suicidal ideation, past attempts, and exposure to suicide. Results found that individuals currently struggling with suicidal ideation were slightly less likely to hold stigmatizing attitudes toward suicide, but were more likely to glorify it (for example, identifying individuals who complete suicide as “strong”, “brave”, “noble”, or “dedicated”) than individuals without ideation. Younger age, male gender, and cultural

diversity were associated with higher levels of stigma toward individuals who complete suicide (Batterham et al., 2013a).

Furthermore, work with individuals and with families bereaved by suicide has substantiated the stigma towards suicide. Interpretative analysis has been used to examine the “lived experience” of participants bereaved by suicide (Begley & Quayle, 2007). Four major themes consistent across participants emerged: Controlling the impact of the suicide; making sense of the suicide; social uneasiness; and purposefulness. These themes may be thought of as stages, though not necessarily linear in nature. Controlling the impact of the suicide refers to the immediate response to a loved one’s suicide. Participants reported changes in communication patterns, increased caution in communicating, and avoiding former social activities during this period. The second theme, making sense of the suicide, is often accompanied by feelings of guilt and blame as individuals search for reasons why the suicide occurred. The third theme, regarding interactions with others after the suicide, revealed that participants shared a sense of social uneasiness. Some participants chose not to share the fact that their loved one’s death was a suicide. Other participants reported feelings of social abandonment and stigmatization after initial support. A sense of failure to understand participants’ difficulties communicating about the suicide by the larger community also contributed to feelings of social isolation and discomfort. The fourth theme, purposefulness, explored how suicide had changed participants’ lives and how these individuals tried to find meaning in life after the death of a loved one. Although most participants reported being able to find a purpose after the suicide, many aspects of their day-to-day living, including social engagements, continued to be impacted by the suicide even five years

later. The feelings of guilt, shame, blame, and stigmatization experienced by suicide loss survivors are factors that distinguish suicide bereavement from bereavement by other modes of death (Botha, Guilfoyle, & Botha, 2009). Stigma is a significant factor in survivors' willingness to talk about suicide; as is the amount of social support that they feel they receive (Hung & Rabin, 2009). These findings highlight the need to combat societal stigma toward suicide.

Attitudes and Stigma Toward Help-Seeking

Research has demonstrated that there is indeed stigma surrounding seeking help for mental health issues and suicidal behavior in particular (Burke, Kerr, & McKeon, 2008; Cigularov et al. 2008; Curtis, 2010; Gilchrist & Sullivan, 2006; Vogel et al., 2007). Many young people experiencing psychological distress, including suicidal thoughts, do not seek help (Cigularov et al., 2008). For example, Burke, Kerr, and McKeon's (2008) work with adolescent males found that students held a generally negative attitude toward mental health services and were not well informed about mental illnesses. Results also indicated that students were very conscious about the stigma associated with seeing a mental health professional. These factors are significant barriers to access of mental health services. This study supports the idea that adolescents hold misguided notions of mental illness and mental health services and that fear of stigmatization plays an important role in sustaining this position.

Similarly, research examining the relationship between perceived public stigma and self-stigma and attitudes toward seeking help has demonstrated a linear relationship between these factors. Results indicated that perceived public stigma is positively related to self-stigma, and that self-stigma is positively related to resistance toward counseling.

Thus, the stronger the perception and fear of being publicly shamed, the greater the self-shame, which in turn creates a more negative attitude toward counseling and decreased willingness to seek help (Vogel et al., 2007).

Curtis' (2010) work in this area has suggested that those seeking help for mental health issues may be perceived as "weak" or "uncool", and that even participants with personal experience with others' mental health issues or suicidal behavior were significantly less likely to seek help for themselves than for others. Likewise, in a study by Gilchrist and Sullivan (2006), youth participants reported a fear of being perceived as "weak and pathetic" if others found out they had sought help for mental health issues. Participants also reported feelings of embarrassment associated with asking for help and fear of being judged within peer groups and the community. Collectively, these findings confirm the role of real or perceived stigmatization as a significant impediment to seeking help for mental health problems. The findings also indicate that reducing both public and individual stigma towards seeking help could be an important factor in suicide prevention efforts.

One study exploring the relationship between stigma (as defined in the study as discomfort dealing with someone expressing suicidal ideation) and warning signs of suicide by comparing reactions to hypothetical situations lends further support for this need (Rudd, Goulding, & Carlisle, 2013). Using a case vignette methodology that varied only the essential warning signs, participants responded to questions gauging urgency of response and their appraisal of the situation, including seriousness, speed of response, comfort level with the situation in general as well as with implementing a response, sureness of response, and hopefulness about their ability to help. Results revealed that

although participants recognized the signs of imminent suicide risk as easily as they recognized the signs of imminent heart attack risk, they were significantly less comfortable and less confident in responding to suicide risk. Moreover, participants were less hopeful that their response to suicide risk would be effective as compared to heart attack risk. Interestingly, participants with a personal or familial history of suicidal behavior were no more likely to respond appropriately to suicide risk than those participants without such history. This research demonstrates the importance of public training not only on recognition of warning signs of suicide but also on appropriate response to suicide risk (Rudd et al., 2013).

Attitudes and Stigma Toward School-Based Suicide Prevention Efforts

Other research in the area of suicide has focused on the relationship between stigmatization and suicide prevention efforts in the schools. Ciffone's (2007) research evaluated the effectiveness of a school-based suicide prevention program in changing attitudes toward suicide. The study replicated research conducted in 1993 by the same author. Over 400 students, divided into treatment and control groups, were administered a brief questionnaire to serve as a baseline measure of student attitudes toward suicide. The day after completing the survey, the treatment groups received an hour-long presentation given by the school social workers on suicide, including a brief video. On the second day, the treatment groups viewed a 30-minute video about teenage depression, were given information materials, and were asked to complete a short quiz. On the third day, the treatment groups reviewed the answers to the quiz and teachers encouraged discussion about the quiz items. The control groups did not participate in any of these activities. The treatment and control groups were administered the same survey 21 days

later. The pre and posttest results showed significant attitudinal change for all targeted areas, including suicide, help-seeking, and the relationship of suicide to mental illness. After receiving the presentation, students reported being more likely to encourage others to seek help as well as more likely to seek help for themselves if they were having suicidal thoughts. This study provides evidence of the willingness of students to participate in suicide prevention programs as well as the capability to influence attitudes and stigma through education.

Additional research in this area has shown that using evidence-based, methodological approaches to school-based suicide prevention is effective in positively changing students' knowledge, attitudes, and self-efficacy towards suicide (Cigularov et al., 2008). Project STIGMA, a theater production and workshop series that aims to raise awareness of mental health issues at the secondary level in schools, was performed in 13 secondary schools. An evaluation questionnaire, which asked the students to rate the play and the extent to which their knowledge and understanding of mental health issues and stigma had increased, was then administered to approximately 1200 secondary students across these schools. The results indicated that the large majority of the students (80% or more) reported that their understanding of stigma, self-harm, and depression had increased. However, those students who had already identified positive attitudes toward mental health issues before the play did not change in their perceptions as a result of the program. Yet most students felt they had learned something worthwhile from the program, including how common mental illness is; that it can affect anyone; how bad the experience can be, and how unkind other people can be. Sixty-eight percent of students

reported that they were not surprised at what they learned, because they had experienced mental illness themselves or witnessed it in friends or family (Thomas & Morgan, 2006).

As previously mentioned, even more promising is the willingness of students to learn, to be educated and aware, and to provide support to their peers in regard to suicide and suicide prevention. A study by Walker, Ashby, Hoskins, and Greene (2009) aimed to explore the effects of the LifeSavers Training program on youth participants. High school students participated in a three-day LifeSavers peer-support suicide prevention training program. The participants were administered pretest and posttest packets. The results indicated a significant increase in knowledge and positive attitudes toward suicide prevention, as well as in self-esteem. This research trend confirms evidence of the capability to influence attitudes and knowledge through education. Other research has shown that students who received an instructional intervention on mental health issues showed significantly more sensitivity and empathy toward individuals with such problems, and concluded that teaching adolescents about mental health issues significantly reduces stigma through increased knowledge (Naylor, Cowie, Walters, Talamelli, & Dawkins, 2009).

However, stigma may be factor even when robust suicide prevention methods are used. Cigularov et al. (2008) sought to identify, assess, and compare adolescents' perceived barriers to help-seeking for self and friends after completing a school-based suicide education program. High school students from five public high schools attended the Raising Awareness of Personal Power (RAPP) program and completed one of two barrier measures: Perceived barriers to seeking help for self (Self -Form) or Perceived barriers to seeking help for others (Other Form). The study found that inability to discuss

problems with parents, overconfidence in the ability to handle problems independently, fear of hospitalization, inability to discuss problems with school adults, and lack of closeness with school adults were the most prominent barriers to seeking help for self. In addition, a heightened sense of self-sufficiency, or believing that they can handle problems on their own, also represents a barrier for adolescents seeking help for themselves. The most prominent barriers to seeking help for a friend included friendship concerns, inapproachability of school adults, fear of a friend's hospitalization, and underestimating a friend's problems. Adolescents face a real dilemma when considering seeking help for a friend, torn between wanting to seek help for a friend because it would be in the friend's best interest, and the motivation to maintain the friend's confidence and preserve the friendship. The conclusions call attention to the fears that students have, relative to reporting suicide to adults (Cigularov et al., 2008).

Moreover, the influence, positive or negative, of adolescents' social and peer groups must be considered when developing suicide prevention programs. A study that explored the role of peer and social groups in the development of suicidal behavior found that exposure to suicidal behaviors in participants' social groups is a significant predictor of suicidal behaviors in the participants themselves. In addition, in the adolescent population, exposure to nonfatal suicidal behavior in family and friends was predictive of suicidal ideation (de Leo & Heller, 2008). The conclusions have important implications for designing school-based suicide prevention programs to address the unique needs of adolescents who may be at particular risk for suicidal behavior due to exposure to the suicidal behaviors of others.

Summary and Research Questions

Suicide continues to be a leading cause of death among adolescents and young adults (CDC, 2013). School-based suicide prevention programs have become more common as an efficient and economical way to reach adolescents (Joshi et al., 2015). However, many schools are reluctant to accept a leadership role in suicide prevention (Erbacher et al., 2015). School suicide prevention programs continue to struggle to adequately address essential factors that may negatively influence their success, including lack of suicide literacy, reluctance to seek help, and stigma (Berman, 2010; Curtis, 2010; Joshi et al., 2015). Stigmatization of suicide and suicidal behaviors continues to be an ongoing barrier to adolescents' willingness to seek help and to developing, implementing, and taking advantage of prevention programs in the school setting (Barney et al., 2006; Batterham et al., 2013b; Calear, et al., 2014; Gilchrist & Sullivan, 2006; Miller et al., 2009; Moskos et al., 2007; Sudak et al., 2008; Vogel et al., 2007). As increasing help-seeking behaviors for at-risk individuals by decreasing stigma is a goal in the National Action Alliance for Suicide Prevention's Research Prioritization Task Force's 2014 research agenda (AASP, 2015), there exists a need for more targeted research to investigate the attitudes of adolescents toward suicide, the development of stigma, and the ways in which stigma may act as a barrier to preventative measures in order to increase the likelihood of school-based suicide prevention efforts being successful (Buda, 2010; Curtis, 2010; Niederkrotenthaler et al., 2014; Pouliot & de Leo, 2006). Therefore, the current study aims to explore several research questions designed to address this issue.

The investigation of contributing and correlational factors and their roles in creating or enhancing stigma toward suicide has been identified in the current literature as being an area of need for future research (Buda, 2010; Pouliot & de Leo, 2006). Attitude toward suicide is one potential factor that could contribute toward real or perceived stigma. A permissive attitude toward suicide has been found to be positively associated with the majority of the identified risk factors for suicide, thus opening the door to exploring permissiveness as a possible contributing factor to the creation of stigma (Arnautovska & Grad, 2010; Joe et al., 2007). Other research has supported the notion that stigmatization is a significant impediment to seeking help for mental health problems because help-seeking is often perceived by adolescents as being “weak” or “uncool” (Curtis, 2010; Gilchrist & Sullivan, 2006). Other factors that may be correlated with stigmatization of suicide include perceptions of suicide as acceptable; the extent of suicide knowledge and literacy; and adolescent views on school-based suicide prevention measures (i.e., suicide as a topic that is addressed in the school setting). Determining the correlational factors that may influence adolescents’ perceived or actual stigma towards suicide and the extent to which stigma negatively impacts help-seeking behaviors is essential in order to develop more rigorous and focused education programs and maximize the effectiveness of school-based suicide prevention measures.

The proposed research questions are as follows:

What are some of the attitudes and perceptions that youth have that may contribute to stigma surrounding suicide and suicidal behavior?

Sub-question: How knowledgeable are adolescents about facts surrounding suicide and suicidal behavior?

How do these attitudes and perceptions influence adolescents' willingness to seek help for self or others?

What are adolescents' views on seeking help for self or others with regard to suicide and suicidal behavior?

Are there differences in attitudes and perceptions of stigma, suicide literacy, or help-seeking behavior between males and females?

Chapter 3: Method

Data Source

This archival study utilized previously collected data from a survey of middle school students regarding attitudes toward suicide and stigma conducted in the early fall of 2015 (see Appendix A). The survey was conducted with 208 seventh grade students at York Suburban Middle School as part of their mandatory health class, the curriculum for which covers physical, social, and mental/emotional health. Students had not yet received instruction in these areas during the current school year, prior to survey administration. Participation was voluntary and did not include those students who chose not to participate, who were placed in a self-contained special education classroom, alternative education or out-of-district setting at the time of the survey, or who did not have health class as part of their schedule for the fall semester. A total of 38 students either opted out of the survey or were not permitted to participate due to lack of informed consent from their parent or guardian. Seventh grade enrollment for the 2015-2016 totaled 264 students (S. Krauser, personal communication, October 13, 2015); therefore, the remaining students were either absent, enrolled in an alternate or out-of-district placement, enrolled in the district after survey administration occurred, or were otherwise not available to participate in the survey.

Setting. York Suburban Middle School (YSMS) is located in York Suburban School District (YSSD), a midsized, suburban, public school district located in York County, Pennsylvania. According to the 2013-2014 School Performance Profile, YSMS was ranked as the top middle school in the state of Pennsylvania (Pennsylvania

Department of Education [PA DOE], 2014). The school has achieved Adequate Yearly Progress (AYP) each year from 2003 to 2012 (PA DOE, 2012).

Racial/ethnic makeup. According to the 2010 United States Census Bureau (2010) data, York Suburban School District serves a resident population of almost 22,000 people. The racial makeup of YSSD is 91.1% White, 5.9% African American, and 2% Asian. Hispanics or Latinos of any race make up 2.5% of the population. Other races or two or more races constitute 1% of the population. Approximately 2.2% of the total student population is identified as English Language Learners (ELL). There are 18 ELL languages identified within the district (YSSD, 2013).

The racial makeup of York Suburban Middle School is 78.4% White, 7.1% African American, 5.6% Hispanic, 4.6% Multiracial (non-Hispanic), 4.3% Asian, and less than 1% American Indian/Alaskan Native. ELL students constitute 1% of the population (YSSD, 2013).

US Census Bureau (2010) data indicated that 60% of the population is employed (in the labor force). The median family income is roughly \$59,000, almost \$10,000 more than state and national median family incomes. In the past year, 3.6% of families had income that fell below the poverty line (US Census Bureau, 2010). During the 2013-2014 school year, 27.8% of students participated in the Federal Free and Reduced Priced Meal Program. Approximately 25% of the student population at York Suburban Middle School is identified as Economically Disadvantaged (YSSD, 2013).

Measures and Materials

The archival data were collected using a survey method. The survey included 15 questions from the Suicide Opinion Questionnaire ([SOQ], Domino, Moore, Westlanke, & Gibson, 1982) and 6 questions from the ATTS, (Salander-Renberg & Jacobsson, 2006). Eight questions were developed by the researcher. The survey included 28 closed-ended questions using a five-point Likert-scale format and 1 question using a drop-down selection format for a total of 29 items. Gender was the only demographic item included.

The SOQ (1982) is a 107-item instrument with 100 of those items designed to assess various attitudes toward suicide and suicidal individuals, and the remaining seven items are demographic items. Respondents answer the attitudinal items on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (strongly disagree). Recent research has examined the reliability and validity properties of the SOQ and other scales that measure attitudes toward suicide. No descriptions exist on the theoretical background that contributed to the development of the items for the SOQ, and therefore a lack of consensus about the psychometric properties of the instrument continues to exist. The final 7 items that represent the SOQ are those for which test-retest reliability coefficients were higher than .68. However, the SOQ appears to have good reliability with most subscale coefficients at .70, the lowest acceptable value (Kodaka, Poštuvan, Inagaki, & Yamada, 2011).

A total of 15 items were adapted from the SOQ for use in the newly created questionnaire. The items were chosen based upon applicability and alignment with the research questions. Thus, the chosen items include assessment of attitudes toward suicide completers (“People who complete suicide are weak”, “Those who complete suicide are

cowards who cannot face life's challenges"); stigma toward suicide ("I would feel ashamed if a member of my family completed suicide", "People who attempt suicide should be required to go to therapy"); and suicide literacy ("The suicide rate is higher for blacks than for whites") (Domino et al., 1982).

The ATTS (1986) comprises 37 statements about suicidal behavior on a 5-point Likert-style answering scale and is influenced by the SOQ. In the second edition of the ATTS, published in 1996, internal consistency was increased but continues to be low for the instrument as a whole. It may be that the instrument is measuring attitudes toward suicide that are too broad (Salander-Renberg & Jacobsson, 2006). In terms of validity, the research team obtained an identical factor model when developing the first edition of the ATTS in 1986 and then the second edition in 1996. This lends ample support for high construct validity. In addition, the ATTS demonstrated significant relationships between attitudes and respondents' suicidal behaviors, which confirmed validity to some degree (Kodaka et al., 2011). In terms of reliability, the coefficients that were computed ranged from 0.38 to 0.66. The research further suggested that reliability of such measures may be impacted because attitudes are not completely stable over time.

A total of 6 items were adapted from the ATTS for use in the newly created questionnaire. The items were chosen, based upon applicability and alignment with the research questions. Thus, the chosen items include assessment of attitudes toward suicide and suicide prevention ("Suicide can be prevented"); suicide literacy ("There is a risk to bring about suicidal thoughts in a person if you ask about it"); willingness to seek help for self or others ("I am prepared to help a person in a suicidal crisis by making contact");

and stigma and judgment towards suicide (“Suicide can never be justified”) (Salander-Renberg & Jacobsson, 2006).

A total of 8 items were added to address attitudes toward suicide prevention measures in the school setting (“I would not voluntarily participate in suicide prevention activities at my school”, “I would be afraid that my parents or friends might think I am thinking about suicide if I participate in suicide prevention activities at my school”, “Suicide and suicide prevention are not things that should be discussed at school”, and “Suicide prevention activities at school are only for students that are thinking about suicide”); and suicide literacy (“I know the warning signs of suicide”). Willingness to seek help for self or others was also addressed (“If I were experiencing major distress, I would feel comfortable talking to my school counselor”, “If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult”, and “In my school, I would feel most comfortable talking to this adult” [chosen from a drop-down menu]).

The complete survey can be viewed in Appendix A.

Procedure

All seventh grade students are required to take the health class as part of the seventh grade curriculum. A total of 8 health sections, covered by two health teachers, participated in the survey. The surveys were administered over a 4-day period in order to cover all health sections for both teachers. Assistance from the health teachers was voluntary, at the survey administrator’s request and with administrative approval. A district cover letter was sent home with students explaining the purpose of the survey, including the options for participation and confidentiality. An informed consent form was provided to students’ parents and/or guardians (see Appendices B and C). Students

and/or their parents/guardians were permitted to choose to opt out of the survey with no penalty to the student's health grade or any other consequence. Students without signed consent forms were not permitted to participate.

The survey was created using Google's survey feature. Students' usernames, student identification numbers, and any other identifying information were not collected as part of the survey in order to avoid any link between students and their surveys. The survey link was provided to students using the SmartBoard available in each classroom. Each classroom was provided with a debriefing concerning the purpose of the survey, and students were assisted with accessing the survey online. Those students who chose not to participate in the survey were excused with the health teacher to another classroom until the survey administration was complete. The survey administrator remained in the classroom for the duration of the survey administration and remained available to answer questions as they arose. Survey administration time ranged from 30 to 45 minutes for each class. Administration time varied according to the time needed to ensure all participants had access to the survey online and to questions before, during, and after survey administration. Participant questions were generally related to logistics (i.e., difficulty accessing the survey online, what to do once they had completed the survey) or need for clarification or explanation of survey items. Students were encouraged to raise their hands if they had questions so that the survey administrator could address their questions privately. However, if several students had the same question, the survey administrator made a general clarification to the class as a whole. After every student had completed the survey, a second debriefing was provided to thank students for their time, give them an opportunity to ask any additional questions, and to ensure that

students were not adversely affected by the sensitive subject matter. The survey administrator remained available in the classroom until the start of the next period for any student who wished to debrief individually. No participants took advantage of this.

Signed consent forms are kept in a locked file. Signed consent forms and surveys are not able to be linked. Electronic data is password-protected.

Data Analysis

Descriptive statistics and frequency data were used to describe each survey item and demographic information. Descriptive statistics and frequency data were also generated for the groups of survey items corresponding to each of the three main research questions and sub-question (see Appendix D). Finally, descriptive statistics and a one-way ANOVA to assess gender differences were generated.

Chapter 4: Results

Descriptive Statistics

A total of 208 participant surveys were collected. Male and female participants were nearly equivalent, with 108 participants identifying as male and 95 participants identifying as female (Table 4.1). Three participants identified as “Other” and two response sets were characterized as “Missing.” Mean and standard deviation, as well as the frequency of Likert-scale responses and the percentage of the total samples those frequencies represented were calculated for each survey item. The descriptive statistics and frequency tables that follow represent survey items grouped by the research question to which they correspond (see Appendix D). A grouping of survey items by source can be found in Appendix E.

Demographic Information

Characteristic	N(%)
Sample size analyzed	208
Gender	
Male	108 (51.9)
Female	95 (45.7)
Other	3 (1.4)
Missing	2 (1)

Research Question 1

Participants answered survey items 1-29 using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The first research question is related to the attitudes and perceptions that youth have that may contribute to stigma surrounding suicide and suicidal behavior. The results indicate that over half of participants (54%) reported that they would feel ashamed if a member of their family completed suicide. The majority of participants (39%) also strongly disagreed that they would consider suicide if

they were suffering from an incurable disease and that those who are suffering from an incurable disease should be allowed to complete suicide in a dignified manner. Nearly half of participants (49.5%) strongly disagreed that there may be situations in which suicide is the only reasonable solution. In addition, 66% of participants strongly disagreed that suicide is a normal behavior, and 45% of participants believe that suicide is morally wrong. The majority of participants responded neutrally (3 on a scale of 1-5), (33.7%) to items related to the justifiability of suicide and the potential for everyone to be a victim of suicide. However, the majority of participants strongly disagreed with the notion that people who complete suicide are weak (42.8%), and that those who complete suicide are cowards (48.6%). In addition, nearly half of participants (49%) disagreed that suicide and suicide prevention are not things that should be discussed at school.

Table 4.2

Descriptive Statistics for Survey Items Corresponding to Research Question 1

Survey Item	<i>N</i>	Mean	<i>SD</i>
1. Suicide can never be justified.	208	3.23	1.353
5. I would feel ashamed if a member of my family completed suicide.	208	4	1.311
6. People who complete suicide are weak.	208	2.15	1.24
8. There may be situations where the only reasonable solution is suicide.	208	1.93	1.165
12. Those who complete suicide are cowards who cannot face life's challenges.	208	1.94	1.145
14. I would consider the possibility of taking my life if I were to suffer from a severe, incurable disease.	208	2.17	1.182
17. People with incurable diseases should be allowed to complete suicide in a dignified manner.	208	2.05	1.172
19. Suicide is a normal behavior.	208	1.46	.721
20. Suicide is a very serious moral transgression.	208	3.88	1.268
21. Potentially, every one of us can be a suicide victim.	208	3.51	1.228
25. Suicide and suicide prevention are not things that should be discussed school.	208	1.98	1.231

Table 4.3

Frequency of Responses for Survey Items Corresponding to Research Question 1

Survey Item	Frequency of Responses (%)				
	1	2	3	4	5
1. Suicide can never be justified.	29(13.9)	29(13.9)	70(33.7)	25(12)	55(26.4)
5. I would feel ashamed if a member of my family completed suicide.	16(7.7)	17(8.2)	31(14.9)	31(14.9)	113(54.3)
6. People who complete suicide are weak.	89(42.8)	43(20.7)	45(21.6)	18(8.7)	13(6.3)
8. There may be situations where the only reasonable solution is suicide.	103(49.5)	51(24.5)	29(13.9)	15(7.2)	10(4.8)
12. Those who complete suicide are cowards who cannot face life's challenges.	101(48.6)	49(23.6)	37(17.8)	11(5.3)	10(4.8)
14. I would consider the possibility of taking my life if I were to suffer from a severe, incurable, disease.	81(38.9)	51(24.5)	45(21.6)	22(10.6)	9(4.3)
17. People with incurable diseases should be allowed to complete suicide in a dignified manner.	94(45.2)	42(20.2)	49(23.6)	13(6.3)	10(4.8)
19. Suicide is a normal behavior.	138(66.3)	46(22.1)	22(10.6)	2(1.0)	0(0)
20. Suicide is a very serious moral transgression.	14(6.7)	19(9.1)	40(19.2)	41(19.7)	94(45.2)
21. Potentially, every one of us can be a suicide victim.	18(8.7)	21(10.1)	61(29.3)	53(25.5)	55(26.4)
25. Suicide and suicide prevention are not things that should be discussed at school.	102(49)	50(24)	29(13.9)	12(5.8)	15(7.2)

Note: 1= Strongly Disagree, 5= Strongly Agree

Research Sub-question 1

The first research sub-question is related to the knowledge that adolescents possess about facts surrounding suicide and suicidal behavior. Descriptive statistics and frequency data for the survey items corresponding to this question are summarized in Table 4.4 and Table 4.5. The results indicate that only 9% of participants felt that individuals who complete suicide are mentally ill; however, over a third of participants

(31.3%) responded neutrally to this item. The remaining participants appeared divided, with 18% strongly disagreeing, 22% moderately disagreeing, and 18% moderately agreeing with this statement. Participants were also divided about whether or not individuals who are at high risk for suicide can be easily identified. While a slight majority of students took a neutral position (28%), 26% moderately disagreed, 18% strongly disagreed, and 18% moderately agreed with this statement. Responses to the item, "I know the warning signs of suicide" were also diverse. Over a third of participants (34%) had a neutral response to knowing the warning signs of suicide, while nearly a quarter of participants (23.6%) moderately agreed with the statement. Sixteen percent strongly agreed, 12% moderately disagreed, and 13% strongly disagreed. Most participants (46.2%) strongly disagreed that suicide attempters are more interested in getting attention and they also strongly disagreed that the suicide rate is higher for blacks than for whites (46.6%).

Table 4.4

Descriptive Statistics for Survey Items Corresponding to Sub-question 1

Survey Item	N	Mean	SD
7. People who complete suicide are usually mentally ill.	208	2.78	1.218
10. Suicide attempters are more interested in getting attention.	208	1.94	1.080
16. The suicide rate is higher for blacks than for whites.	208	1.92	.977
22. People who are at high risk for suicide can be easily identified.	208	2.70	1.179
28. I know the warning signs of suicide.	208	3.17	1.238

Table 4.5

Frequency of Responses for Survey Items Corresponding to Sub-question 1

Survey Item	Frequency of Responses (%)				
	1	2	3	4	5
7. People who complete suicide are usually mentally ill.	38(18.3)	47(22.6)	65(31.3)	38(18.3)	20(9.6)
10. Suicide attempters are more interested in getting attention.	96(46.2)	53(25.5)	40(19.2)	13(6.3)	6(2.9)
16. The suicide rate is higher for blacks than for whites.	97(46.6)	40(19.2)	64(30.8)	5(2.4)	2(1)
22. People who are at high risk for suicide can be easily identified.	38(18.3)	56(26.9)	60(28.8)	39(18.8)	15(7.2)
28. I know the warning signs of suicide.	28(13.5)	26(12.5)	71(34.1)	49(23.6)	34(16.3)

Note: 1= Strongly Disagree, 5= Strongly Agree

Research Question 2

The second research question is related to the attitudes and perceptions that influence adolescents' willingness to seek help for themselves or for others. Descriptive statistics and frequency data for the survey items corresponding to this question are summarized in Table 4.6 and Table 4.7. The results indicate that the majority of participants (67%) moderately or strongly disagreed that suicide is a subject that should not be talked about. Nearly 43% of participants (42.8) strongly agree that individuals

who attempt suicide should be required to go to therapy to understand why the attempt was made. It is encouraging that the large majority of participants (68%) strongly agreed that they would report their concerns about a peer having suicidal thoughts to an adult. Most students (61.5%) agreed or strongly agreed that they would feel comfortable talking to their school counselor. It is worth noting, however, that almost 10% (9.6%) of participants were neutral, or unsure about whether or not they would report concerns to an adult. Seventy-one percent of participants moderately or strongly agreed that they are prepared to help someone in a suicidal crisis by making contact. However, participants were divided about whether or not they would or would not voluntarily participate in school-based suicide prevention activities. Twenty-eight percent of participants took a neutral position (28%), but 47% either strongly or moderately disagreed and 24.5% of participants strongly or moderately agreed with this statement. Yet the majority of students (56.3%) disagreed or strongly disagreed that they would be afraid that their parents or friends might believe that they are thinking about suicide if they did participate.

Table 4.6

Descriptive Statistics for Survey Items Corresponding to Research Question 2

Survey Item	<i>N</i>	Mean	<i>SD</i>
3. Suicide is a subject that one should not talk about.	208	2.08	1.266
9. People who attempt suicide should be required to go to therapy to understand why.	208	4.04	1.044
13. If I were experiencing major distress, I would feel comfortable talking to my school counselor.	208	3.66	1.301
15. I am prepared to help a person in a suicidal crisis by making contact.	208	4.08	1.021
23. I would not voluntarily participate in suicide prevention activities at my school.	208	2.66	1.301
24. I would be afraid that my parents or friends might believe that I am thinking about suicide if I participate in suicide prevention activities at my school.	208	2.48	1.393
27. If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult.	208	4.47	.922

Table 4.7

Frequency of Responses for Survey Items Corresponding to Research Question 2

Survey Item	Frequency of Responses (%)				
	1	2	3	4	5
3. Suicide is a subject that one should not talk about.	95(45.7)	46(22.1)	40(19.2)	9(4.3)	18(8.7)
9. People who attempt suicide should be required to go to therapy to understand why.	6(2.9)	10(4.8)	43(20.7)	60(28.8)	89(42.8)
13. If I were experiencing major distress, I would feel comfortable talking to my school counselor.	18(8.7)	26(12.5)	36(17.3)	56(26.9)	72(34.6)
15. I am prepared to help a person in a suicidal crisis by making contact.	3(1.4)	13(6.3)	43(20.7)	54(26)	95(45.7)
23. I would not voluntarily participate in suicide prevention activities at my school.	49(23.6)	49(23.6)	59(28.4)	25(12)	26(12.5)
24. I would be afraid that my parents or friends might believe that I am thinking about suicide if I participate in suicide prevention activities at my school.	70(33.7)	47(22.6)	40(19.2)	24(11.5)	27(13)
27. If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult.	4(1.9)	6(2.9)	20(9.6)	36(17.3)	142(68.3)

Note: 1= Strongly Disagree, 5= Strongly Agree

Research Question 3

The third research question is related to adolescents' views on seeking help for themselves or others with regard to suicide and suicidal behavior. Descriptive statistics and frequency data for the survey items corresponding to this question are summarized in Table 4.8, Table 4.9, and Table 4.10. The results indicate that an overwhelming majority of participants (86%) moderately or strongly disagreed that individuals should not interfere with those who want to complete suicide. Likewise, 85% of participants believe suicide can be prevented. However, the majority of participants (38.9%)

responded neutrally to the statements “There is a risk to bring about suicidal thoughts in a person if you ask about it” and “It’s rare for someone who is thinking about suicide to be dissuaded by a “friendly ear.” The majority of participants (47%) reported feeling most comfortable discussing concerns with their school counselors. Fourteen percent of participants identified a teacher and almost 16% (15.9%) identified another adult (not listed from the drop-down menu) as the individual to whom they would be most comfortable talking. It is of some interest that 12% of participants reported that they felt most comfortable talking with the school psychologist. In addition, the majority of participants (46%) strongly disagreed that school-based suicide prevention activities are only for students that are thinking about suicide.

Table 4.8

Descriptive Statistics for Survey Items Corresponding to Research Question 3

Survey Item	<i>N</i>	Mean	<i>SD</i>
2. There is a risk to bring about suicidal thoughts in a person if you ask about it.	208	3.32	1.066
4. Suicide can be prevented.	208	4.35	.967
11. If someone wants to complete suicide, it is their business and we should not interfere.	208	1.56	.893
18. It’s rare for someone who is thinking about suicide to be dissuaded by a “friendly ear.”	208	2.88	1.024
26. Suicide prevention activities at school are only for students that are thinking about suicide.	208	1.96	1.107
29. In my school, I would feel most comfortable talking to this adult: Teacher, Principal, School counselor, School psychologist, School nurse, Coach, Other	208	--	--

Table 4.9

Frequency of Responses for Survey Items Corresponding to Research Question 3

Survey Item	Frequency of Responses (%)				
	1	2	3	4	5
2. There is a risk to bring about suicidal thoughts in a person if you ask about it.	11(5.3)	30(14.4)	81(38.9)	54(26)	32(15.4)
4. Suicide can be prevented.	6(2.9)	6(2.9)	19(9.1)	55(26.4)	122(58.7)
11. If someone wants to complete suicide, it is their business and we should not interfere.	133(63.9)	46(22.1)	18(8.7)	9(4.3)	2(1)
18. It's rare for someone who is thinking about suicide to be dissuaded by a "friendly ear."	21(10.1)	42(20.2)	102(49)	26(12.5)	17(8.2)
26. Suicide prevention activities at school are only for students that are thinking about suicide.	97(46.6)	51(24.5)	36(17.3)	19(9.1)	5(2.4)

Note: 1= Strongly Disagree, 5= Strongly Agree

Table 4.10

Frequency of Responses for Survey Item 29 (Corresponding to Research Question 3)

Survey Item	Frequency of Responses (%)
29. In my school, I would feel most comfortable talking to this adult:	
Teacher	30(14.4)
Principal	8(3.8)
School counselor	99(47.6)
School psychologist	25(12)
School nurse	4(2)
Coach	9(4.3)
Other	33(15.9)

Research Question 4

The fourth research question aims to explore the differences in attitudes and perceptions of stigma, suicide literacy, or help-seeking behavior between males and females. Descriptive statistics for all survey items (with the exception of Item 29) are summarized in Table 4.11. A one-way analysis of variance (ANOVA) was also

generated to compare mean differences between and within gender and is summarized in Table 4.12. The results indicate that there were significant differences between the means for males and females for three survey items: Suicide can never be justified ($F(1, 201) = 4.73, p = .031$); those who complete suicide are cowards who cannot face life's challenges ($F(1, 201) = 7.26, p = .008$); and people with incurable diseases should be allowed to complete suicide in a dignified manner ($F(1, 201) = 4.22, p = .041$).

Descriptive statistics by gender for those items are as follows: Suicide can never be justified (Male $M = 3.40, SD = 1.43$; Female $M = 2.99, SD = 1.22$); those who complete suicide are cowards who cannot face life's challenges (Male $M = 2.13, SD = 1.22$; Male $M = 1.71, SD = .988$); and people with incurable diseases should be allowed to complete suicide in a dignified manner (Male $M = 2.19, SD = 1.26$; Female $M = 1.86, SD = .996$).

Table 4.11

Descriptive Statistics for All Survey Items by Gender (N=203)

Survey Item	N	Mean	SD
1. Suicide can never be justified.			
Male	108	3.40	1.434
Female	95	2.99	1.216
2. There is a risk to bring about suicidal thoughts in a person if you ask about it.			
Male	108	3.44	1.035
Female	95	3.21	1.100
3. Suicide is a subject that one should not talk about.			
Male	108	2.10	1.297
Female	95	2.04	1.220
4. Suicide can be prevented.			
Male	108	4.42	.968
Female	95	4.27	.950
5. I would feel ashamed if a member of my family completed suicide.			
Male	108	4.08	1.239
Female	95	3.88	1.390

6. People who complete suicide are weak.			
Male	108	2.18	1.289
Female	95	2.09	1.212
7. People who complete suicide are usually mentally ill.			
Male	108	2.79	1.276
Female	95	2.76	1.155
8. There may be situations where the only reasonable solution is suicide.			
Male	108	1.94	1.202
Female	95	1.96	1.138
9. People who attempt suicide should be required to go to therapy to understand why.			
Male	108	4.08	1.086
Female	95	3.94	.998
10. Suicide attempters are more interested in getting attention.			
Male	108	1.91	1.072
Female	95	1.94	1.090
11. If someone wants to complete suicide, it is their business and we should not interfere.			
Male	108	1.49	.803
Female	95	1.67	.994
12. Those who complete suicide are cowards who cannot face life's challenges.			
Male	108	2.13	1.224
Female	95	1.71	.988
13. If I were experiencing major distress, I would feel comfortable talking to my school counselor.			
Male	108	3.79	1.305
Female	95	3.55	1.278
14. I would consider the possibility of taking my life if I were to suffer from a severe, incurable, disease.			
Male	108	2.11	1.218
Female	95	2.25	1.139
15. I am prepared to help a person in a suicidal crisis by making contact.			
Male	108	4.16	1.034
Female	95	3.99	1.005
16. The suicide rate is higher for blacks than for whites.			
Male	108	1.90	.956
Female	95	1.94	.998

17. People with incurable diseases should be allowed to complete suicide in a dignified manner.				
	Male	108	2.19	1.264
	Female	95	1.86	.996
18. It's rare for someone who is thinking about suicide to be dissuaded by a "friendly ear."				
	Male	108	2.78	1.062
	Female	95	2.97	.983
19. Suicide is a normal behavior.				
	Male	108	1.38	.707
	Female	95	1.51	.698
20. Suicide is a very serious moral transgression.				
	Male	108	3.99	1.336
	Female	95	3.76	1.191
21. Potentially, every one of us can be a suicide victim.				
	Male	108	3.50	1.227
	Female	95	3.55	1.201
22. People who are at high risk for suicide can be easily identified.				
	Male	108	2.81	1.161
	Female	95	2.60	1.180
23. I would not voluntarily participate in suicide prevention activities at my school.				
	Male	108	2.73	1.294
	Female	95	2.59	1.325
24. I would be afraid that my parents or friends might believe that I am thinking about suicide if I participate in suicide prevention activities at my school.				
	Male	108	2.47	1.456
	Female	95	2.44	1.310
25. Suicide and suicide prevention are not things that should be discussed at school.				
	Male	108	2.02	1.215
	Female	95	1.93	1.257
26. Suicide prevention activities at school are only for students that are thinking about suicide.				
	Male	108	1.89	.998
	Female	95	2.04	1.228
27. If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult.				
	Male	108	4.44	1.008
	Female	95	4.51	.836

28. I know the warning signs of suicide.			
Male	108	3.06	1.259
Female	95	3.28	1.200

Table 4.12

One-Way Analysis of Variance (ANOVA) for Gender

Survey Item	SS	df	Mean Square	F
1. Suicide can never be justified.				
Between Groups	8.441	1	8.441	4.728*
Within Groups	358.869	201	1.785	
Total	367.310	202		
2. There is a risk to bring about suicidal thoughts in a person if you ask about it.				
Between Groups	2.766	1	2.766	2.433
Within Groups	228.456	201	1.137	
Total	231.222	202		
3. Suicide is a subject that one should not talk about.				
Between Groups	.108	1	.180	.113
Within Groups	319.711	201	1.591	
Total	319.892	202		
4. Suicide can be prevented.				
Between Groups	1.033	1	1.033	1.122
Within Groups	185.134	201	.921	
Total	186.167	202		
5. I would feel ashamed if a member of my family completed suicide.				
Between Groups	2.004	1	2.004	1.164
Within Groups	345.976	201	1.721	
Total	347.980	202		
6. People who complete suicide are weak.				
Between Groups	.333	1	.333	.218
Within Groups	307.805	201	1.531	
Total	308.138	202		
7. People who complete suicide are usually mentally ill.				
Between Groups	.043	1	.043	.029
Within Groups	299.533	201	1.490	
Total	299.576	202		
8. There may be situations where the only reasonable solution is suicide.				
Between Groups	.026	1	.026	.091
Within Groups	276.378	201	1.375	
Total	276.404	202		

9. People who attempt suicide should be required to go to therapy to understand why.				
Between Groups	1.085	1	1.085	.992
Within Groups	219.871	201	1.094	
Total	220.956	202		
10. Suicide attempters are more interested in getting attention.				
Between Groups	.044	1	.044	.038
Within Groups	234.695	201	1.168	
Total	234.739	202		
11. If someone wants to complete suicide, it is their business and we should not interfere.				
Between Groups	1.692	1	1.692	2.100
Within Groups	161.875	201	.805	
Total	163.567	202		
12. Those who complete suicide are cowards who cannot face life's challenges.				
Between Groups	9.102	1	9.102	7.262*
Within Groups	251.933	201	1.253	
Total	261.034	202		
13. If I were experiencing major distress, I would feel comfortable talking to my school counselor.				
Between Groups	2.903	1	2.903	1.739
Within Groups	335.639	201	1.670	
Total	338.542	202		
14. I would consider the possibility of taking my life if I were to suffer from a severe, incurable, disease.				
Between Groups	1.012	1	1.012	.725
Within Groups	280.604	201	1.396	
Total	281.616	202		
15. I am prepared to help a person In a suicidal crisis by making contact.				
Between Groups	1.425	1	1.425	1.369
Within Groups	209.314	201	1.041	
Total	210.739	202		

16. The suicide rate is higher for blacks than for whites.				
Between Groups	.076	1	.076	.079
Within Groups	191.501	201	.953	
Total	191.576	202		
17. People with incurable diseases should be allowed to complete suicide in a dignified manner.				
Between Groups	5.547	1	5.547	4.221*
Within Groups	264.138	201	1.314	
Total	269.685	202		
18. It's rare for someone who is thinking about suicide to be dissuaded by a "friendly ear."				
Between Groups	1.837	1	1.837	1.745
Within Groups	211.572	201	1.053	
Total	213.409	202		
19. Suicide is a normal behavior.				
Between Groups	.798	1	.798	1.617
Within Groups	99.183	201	.493	
Total	99.980	202		
20. Suicide is a very serious moral transgression.				
Between Groups	2.740	1	2.740	1.698
Within Groups	324.422	201	1.614	
Total	327.163	202		
21. Potentially, every one of us can be a suicide victim.				
Between Groups	.113	1	.113	.077
Within Groups	296.537	201	1.475	
Total	296.650	202		
22. People who are at high risk for suicide can be easily identified.				
Between Groups	2.332	1	2.332	1.704
Within Groups	275.096	201	1.369	
Total	277.429			
23. I would not voluntarily participate in suicide prevention activities at my school.				
Between Groups	1.019	1	1.019	.595
Within Groups	344.202	201	1.712	
Total	345.222	202		

24. I would be afraid that my parents or friends might believe that I am thinking about suicide if I participate.	Between Groups	.046	1	.046	.024
	Within Groups	388.348	201	1.932	
	Total	388.394	202		
25. Suicide and suicide prevention are not things that should be discussed at school.	Between Groups	.430	1	.430	.282
	Within Groups	306.447	201	1.525	
	Total	306.877	202		
26. Suicide prevention activities at school are only for students that are thinking about suicide.	Between Groups	1.186	1	1.186	.960
	Within Groups	248.498	201	1.236	
	Total	249.685	202		
27. If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult.	Between Groups	.187	1	.187	.215
	Within Groups	174.414	201	.868	
	Total	174.601	202		
28. I know the warning signs of suicide.	Between Groups	2.642	1	2.642	1.741
	Within Groups	304.993	201	1.517	
	Total	307.635	202		

*p < 0.05

Chapter 5: Discussion

Summary and Significance of the Findings

The purpose of this quantitative archival study was to investigate the perceptions and attitudes of adolescents toward suicide, real or perceived stigmatization of suicide, and help-seeking behavior, using previously collected data from a survey of 208 seventh grade students at a suburban middle school. A total of five research questions (including one sub-question) were explored, using descriptive statistics and frequency data for groups of survey items. The results yielded enlightening results with respect to each research question.

Research Question 1: What are some of the attitudes and perceptions that youth have that may contribute to stigma surrounding suicide and suicidal behavior? In examining the grouping of items that correspond to this research question, it would appear that adolescents do hold some stigmatizing attitudes toward suicide. Shame and an individual sense of morality and what should be considered “normal” behavior may contribute to these attitudes. Most participants would not consider suicide to be a viable solution even in extenuating circumstances such as having an incurable disease. Most participants also feel that suicide is a serious moral transgression. However, participants appear ambivalent about whether or not suicide can be justified. This raises questions about what, if any, specific situations may justify suicide. Furthermore, the majority of students strongly agreed that they would feel ashamed if a member of their family completed suicide. In work with survivors of suicide, shame is found not only to be somewhat unique to the grieving process of suicide, but can also affect how survivors receive the help offered to them (Botha et al., 2009; Lam, 2014).

This finding must be carefully considered in developing and implementing school-based suicide prevention programs, as it may represent a barrier to participation in such programs or to seeking help for self.

Even with the presence of some of these more stigmatizing attitudes, most participants do not believe that individuals who complete suicide are weak or cowards. This suggests that adolescents have at least some degree of compassion or understanding toward individuals who complete suicide and possibly toward those struggling with suicidal ideation or behavior, despite their beliefs about the morality and justifiability of suicide. Participants were also indecisive about whether or not all individuals have the potential to become suicide victims, which may imply an awareness of the susceptibility of anyone to suicide or suicidal behaviors. These findings, coupled with the fact that the majority of participants disagreed that suicide and suicide prevention are not things that should be discussed school, may indicate the capacity to improve the stigmatizing attitudes that adolescents hold toward suicide through carefully-designed school-based suicide prevention programs which use these more positive perspectives as a foundation.

Research Sub-question 1: How knowledgeable are adolescents about facts surrounding suicide and suicidal behavior? Participant responses to this grouping of items widely varied. The results indicate that, overall, adolescent knowledge of suicide and related topics such as mental illness constitutes an area in which more education and awareness is needed. A “neutral” response to items in this group may be indicative of uncertainty. Most participants are uncertain about whether or not those who complete suicide are mentally ill. This may indicate a need for further education about mental health disorders associated with suicide, such as depression. Participants also responded

neutrally to questions about suicide rates by ethnicity and by ability to identify the warning signs of suicide. However, participants disagreed that individuals who attempt suicide are more interested in getting attention, suggesting a basic knowledge of myths related to suicide. The results confirm the crucial need for school-based suicide prevention and awareness programs and for activities that focus on identification of warning signs and how to intervene when concern for self or a peer arises. Considering that suicide is the leading cause of death for youth in the same age group as the participants (AFSP, 2015; CDC, 2013), and that most peers will share concerns with a peer first, it is disconcerting at best that over a third of participants had a neutral response to knowing the warning signs of suicide, while a quarter of participants moderately or strongly disagreed with this statement.

Research Question 2: How do these attitudes and perceptions influence adolescents' willingness to seek help for self or others? The results related to this grouping of items were more encouraging and confirmed the fact that adolescents are willing to provide support to their peers through discussing suicide, to make contact with a peer for whom they are concerned, or to share concerns with a responsible adult. Similar results were found by Cigularov et al. (2008) and Walker et al. (2009), which validated the readiness of adolescents to lend support and assistance to their peers with regard to suicide prevention, particularly after participating in a suicide prevention training program designed to increase peer support. Communication seems to be a key aspect of the success of prevention programs, and the results indicate that students strongly believe that suicide is a topic of discussion that should not be avoided. Actual participation in school-based suicide prevention activities, however, continues to be a

delicate issue over which students are divided. This may be indicative of concern for real or perceived stigma from peers or family that participation in such programs or activities might carry. Other barriers, such as overconfidence in ability to handle problems independently, inability to discuss problems with school adults, or lack of closeness with school adults may also be barriers to participation and to help-seeking, as supported by the aforementioned studies (Cigularov et al, 2008; Walker et al., 2009). The results stress the importance of developing and implementing suicide prevention activities which directly address such barriers and of taking measures to eliminate or significantly reduce them. Students may need to see a clear connection between open discussion of suicide with each other and with the adults in the school setting and the activities or programs designed to prevent suicide. In addition, schools must ensure that all students have access to their school counselor or other adults with whom they feel comfortable sharing concerns (this is discussed in greater detail relative to Research Question 3). Students also seem to believe that therapy can be useful in helping individuals who have attempted suicide. This may have implications for the role of the school psychologist in school-based suicide prevention or intervention. Schools may want to consider including outside therapeutic resources that are available to students and incorporating that information into prevention and intervention programs and ensure that such resources are available to all students.

Research Question 3: What are adolescents' views on seeking help for self or others with regard to suicide and suicidal behavior? Results indicate that overwhelming majority of participants believes that suicide can be prevented and that intervention is necessary. However, adolescents appear to be unsure of how to intervene

and fear that discussing concerns directly with a peer may result in creating suicidal ideation. This again substantiates the need for increased prevention education with concrete directives for students with regard to how to intervene or assist others for whom they have concerns. It is of some interest that although the results suggest a degree of uncertainty with regard to participation in school-based suicide prevention activities, participants largely disagreed that such activities are only for students who are thinking about suicide. This suggests that students are at least open to the idea of participation in such programs for any and all students. It may be worth further exploration concerning the reasons why students are hesitant to participate so that such barriers can be addressed.

The large majority of participants were able to identify an adult within the school setting with whom they would feel comfortable sharing concerns. This finding is reassuring in light of previous research that has demonstrated the importance of connectedness and social support at school as protective factors against suicide (Batterham et al., 2013a; Cash, 2004; CDC, 2012; Erbacher et al., 2015; Miller et al., 2009). A small percentage of students identified teachers as adults with whom they would feel comfortable talking. This affirms the necessity of suicide prevention training for teachers in order to provide effective assistance to students in need. However, a small percentage of participants identified an adult not listed on the drop-down menu of common adult confidants in the school setting. It may be worth exploring this item in greater detail to determine other adults in the school setting with whom students are comfortable discussing concerns or to determine if the item is invalid (i.e., perhaps students did not read the word “adult” in the statement and chose “Other” to represent their peers). A small percentage of students identified this adult as the school

psychologist, which may have implications for school psychologists' role in developing and implementing school-based suicide prevention activities and for their increased visibility in the schools as mental health experts. It is worth noting that only a very small percentage of students chose their Coach to fulfill the role of confidant. These findings lead to questions about the reasons why and how students are choosing these particular adults in whom to confide. This information may be useful in helping schools decide those non-mandatory personnel who should receive suicide prevention training and also the type of training that should be included. As mentioned previously, these results also emphasize the importance of ensuring student access to adults in the school setting.

Research Question 4: Are there differences in attitudes and perceptions of stigma, suicide literacy, or help-seeking behavior between males and females?

The results indicate that there were significant differences between the means for males and females for three survey items: Suicide can never be justified; those who complete suicide are cowards who cannot face life's challenges; and people with incurable diseases should be allowed to complete suicide in a dignified manner. Closer examination of the means for males and females for these items indicates that females tended to disagree that suicide can never be justified, while males were slightly more indecisive regarding the justification of suicide. Females tended to disagree more strongly than males that those who complete suicide are cowards who cannot face life's challenges. However, females also tended to disagree more strongly that people with incurable diseases should be allowed to complete suicide in a dignified manner. Overall, the results would indicate the males and females tend to have similar opinions and perspectives on suicide, stigma, and help-seeking, at least at this life stage. This has

implications for development of suicide prevention activities and programs. For example, it may help to establish that males and females can participate in such activities together without special consideration for gender differences. Curricula and activities can be consistent and uniform for all students to ensure that all students receive and learn the same information. This finding has further implications for general accessibility and feasibility of such programs in the school setting to be able to reach a large audience at one time.

Impact for Schools

The current study is unique in that it examines the attitudes and perceptions of young adolescents in seventh grade in a suburban middle school. Much suicide research with adolescents uses older adolescent populations such as high school aged participants. In light of the fact that suicide ranks as the leading cause of death for students in this age group (AFSP, 2015; CDC, 2013), the impact of this study has the potential to be invaluable to continued suicide prevention efforts across settings and school-age populations. Specifically, the results point to the need to implement school-based suicide prevention programs at an early age. Findings suggest that adolescents as young as middle school age already hold stigmatizing attitudes toward suicide and toward seeking help for suicidal behaviors. Thus, school entities should consider introducing the topic of suicide as early as possible, during the late elementary years or first year of middle school at the latest. Health curricula during this period should include an age-appropriate discussion of suicide as related to mental health and emotional wellbeing. In addition, it appears that this population may be wary of participation in suicide prevention activities or programs, possibly due to real or perceived stigma surrounding this topic. Therefore,

the findings highlight the importance of working to eradicate the stigma that surrounds suicidality and help-seeking. Attaining early student interest and buy-in for participation in school-based prevention activities may help to make this possible.

Of greater concern is the large percentage of participants who reported not feeling confident in being able to identify warning signs of suicide. This suggests that the level of current exposure to suicide prevention and education for this population is clearly not enough. As previously stated, suicide is the leading cause of death for 10-14 year olds in Pennsylvania (AFSP, 2015); however, in many school districts, the setting of the current study included, students are not exposed to suicide education specifically (outside of learning about the importance of general mental and emotional wellness) until high school. Those students that do not take the required high school health course until their junior or senior years are denied exposure to suicide education in the school setting until they are well into adolescence. Clearly, this is much too late. Students should be exposed to suicide education and awareness, including identification of warning signs of suicide and instruction on how and from whom to seek help if they are concerned for themselves or for a peer, as early as possible in order to improve the likelihood of earlier intervention.

The study may also impact future legislation in the areas of suicide prevention and intervention. Pennsylvania recently passed legislation which requires public school entities to develop and implement a youth suicide awareness and prevention policy as well as provide professional development related to youth suicide awareness and prevention to professional educators working with students in grades 6-12. Although it is promising that this piece of legislation recognizes the need for professional education and

awareness for those working with students, prevention education specifically for students is still not required under the law. Current wording of the law merely “permits” school entities to include the topic of suicide and suicide prevention within curriculum instruction. Moreover, current findings suggest that this topic should be introduced as early as is appropriate and possible. Perhaps the findings of the current study may help to further refine legislation to mandate prevention education and awareness for students as well as for educators.

Local Impact

The research questions explored in the current study were proposed in order to investigate not only how the attitudes and perceptions of adolescents toward suicide contribute to stigma, but also how these attitudes might affect help-seeking for self or others. This information is vital to increasing participation in and the ultimate success of school-based suicide prevention programs. The findings of the current study are promising with regard to adolescents’ awareness that suicide is a problem for children in their age group and that they are in a position to, and should, help when they have concerns. Although some stigmatizing attitudes persist, such as viewing suicide as a moral transgression and associating suicide of a loved one with feelings of shame, adolescents do not view those who complete suicide as “weak” and are willing to intervene when necessary. The most important implication is the importance of early exposure to purposefully-designed suicide prevention and education, which includes awareness of warning signs, discussion of suicide myths and facts, and instruction for seeking help for suicidal concerns. Programs and/or activities addressing these areas

should be considered for students starting at the middle school level or even late elementary years, and continued through high school.

The current study results will be shared with the district site from which the data were collected, and it is the researcher's hope that the findings will be used to assist in the further development of the district's suicide prevention policy. Having research on which to base decisions regarding suicide education, awareness, prevention, and intervention is advantageous to the district with regard to policy development. The district can use the current research to justify such decisions to parents, the school board, and other community stakeholders. Policy changes could include earlier exposure to the topic of suicide, ideally included in seventh grade health curriculum; implementation of specific student prevention education and awareness activities as early as possible; implementation of a universal screener for suicide; implementation of a research-based suicide prevention program; and/or inclusion of suicide in a "Prevention Week" or other school-based awareness campaigns. The district's decisions regarding policy may help to establish a precedent, encouraging other school districts to follow.

Limitations

The current study has several limitations which should be considered in the context of the results. First, this study explored attitudes of a small, ethnically and culturally homogenous sample of seventh grade students in a suburban, middle class setting. Although additional demographic data were not requested as part of the survey, based on the setting in which the data were collected, the data may not represent the attitudes and perceptions of minority populations. Therefore, the generalizability of the results to other larger, more diverse populations may be impacted.

A second limitation is the use of data collected using a non-standardized instrument. The survey was a hybrid of questions from two standardized instruments and researcher-developed questions; the survey as a whole did not undergo the rigorous standardization process in order to ensure robust psychometric properties and survey validity. In addition, the survey was not piloted before implementation, and therefore, there were questions which participants did not understand and should have been rejected as part of the survey, but on which data was collected nonetheless. Specifically, administration groups consistently requested clarification on the word “transgression” or the phrase “moral transgression” as related to Item 20 ; the word “justified” as related to Item 1; and Item 18 as a whole, “It’s rare for someone who is thinking about suicide to be dissuaded by a ‘friendly ear.’” Thus, the data and resulting conclusions of this study should be interpreted with some degree of caution.

Despite these limitations, this study that explored adolescent attitudes toward suicide, stigma, and help-seeking yielded valuable findings.

Future Directions

This study lends itself to a number of future directions. With regard to the survey with which the data were collected, future studies may choose to further develop or to standardize and pilot the survey for wider application. Administration of the survey to both younger and older adolescents and to young adults will add to the much-needed body of research with these populations. Additional research may also use the survey to explore comparisons across age, grade, or ethnic groups or to compare attitudes and perceptions of suicide of groups participating in formal suicide awareness and education programs or activities with those who are not participating in such programs. The survey

could also be used with students participating in evidenced-based or district-developed suicide prevention programs as a pre-post measure to determine the effectiveness and outcomes of such programs with regard to attitudes and perceptions of suicide, stigma, and help-seeking. Finally, based on the results of Item 29, it may be worth further exploration to determine those adults in the school setting with whom students are comfortable discussing concerns (other than those covered in the current survey).

References

- Action Alliance for Suicide Prevention (AASP). (2015). *Research Prioritization Task Force*. Retrieved from <http://actionallianceforsuicideprevention.org/task-force/research-prioritization>
- Aevidum. (2014). *Aevidum*. Retrieved from <http://aevidum.com/index.html>
- American Association of Suicidology. (2010a). *Facts about suicide and depression*. Washington, DC: Author.
- American Association of Suicidology. (2010b). *Youth suicidal behavior fact sheet*. Washington, DC: Author.
- American Foundation for Suicide Prevention (AFSP). (2014). *Pennsylvania adopts bill requiring comprehensive suicide prevention policies in schools*. Retrieved from <http://www.afsp.org/advocacy-public-policy/policy-news-updates/pennsylvania-adopts-bill-requiring-comprehensive-suicide-prevention-policies-in-schools>
- American Foundation for Suicide Prevention (AFSP). (2015). *Suicide: Pennsylvania 2015 facts and figures*. Retrieved from <https://www.afsp.org/content/download/16201/266439/file/Pennsylvania%20Fact%20Sheet%20NEW.pdf%2B%26cd=2%26hl=en%26ct=clnk%26gl=us>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing. doi: 10.1176/appi.books.9780890425596.807874
- Arnautovska, U., & Grad, O. T. (2010). Attitudes toward suicide in the adolescent population. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 31(1), 22-29. doi:10.1027/0227-5910/a000009

- Aseltine, R. H., & DeMartino, R. (2004). An outcome evaluation of the SOS suicide prevention program. *American Journal of Public Health, 94*, 446-451.
- Aseltine, R. H., Schilling, E. A., James, A., & Glanovsky, J. (2007). Evaluating the SOS suicide prevention program: A replication and extension. *BMC, 7*, 161.
- Azrak, S. & Kelly, J. (2009). More than sad: Preventing teen suicide- an educational initiative. *Communique, 38*(3), 32.
- Barney, L. J., Griffiths, K. M., Jorm, A. F., & Christensen, H. (2006). Stigma about depression and its impact on help-seeking intentions. *Australian and New Zealand Journal of Psychiatry, 40*(1), 51-54. doi:10.1111/j.1440-1614.2006.01741.x
- Batterham, P. J., Calear, A. L., & Christensen, H. (2013a). Correlates of suicide stigma and suicide literacy in the community. *Suicide & Life-Threatening Behavior, 43*(4), 406-417. doi:10.1111/sltb.12026
- Batterham, P. J., Calear, A. L., & Christensen, H. (2013b). The Stigma of Suicide Scale: Psychometric properties and correlates of the stigma of suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 34*(1), 13-21. doi:10.1027/0227-5910/a000156
- Begley, M., & Quayle, E. (2007). The lived experience of adults bereaved by suicide: A phenomenological study. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 28*(1), 26-34. doi:10.1027/0227-5910.28.1.26
- Berman, A. L. (2009). School-based suicide prevention: Research advances and practice implications. *School Psychology Review, 38*(2), 233-238.

- Botha, K., Guilfoyle, A., & Botha, D. (2009). Beyond normal grief: A critical reflection on immediate post-death experiences of survivors of suicide. *Australian e-Journal for the Advancement of Mental Health*, 8(1), 1-11.
- Buda, B. (2010). Understanding suicide: A critical stance. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*, 31(3), 165-166.
doi:10.1027/02275910/a000037
- Burke, S., Kerr, R., & McKeon, P. (2008). Male secondary school students' attitudes towards using mental health services. *Irish Journal of Psychological Medicine*, 25(2), 52-56.
- Calear, A. L., Batterham, P. J., & Christensen, H. (2014). Predictors of help-seeking for suicidal ideation in the community: Risks and opportunities for public suicide prevention campaigns. *Psychiatry Research*, 219(3), 525-530.
doi:10.1016/j.psychres.2014.06.027
- Cash, R.E. (2004). Depression in young children: Information for parents and educators. In Canter, Paige, Roth, Romero, & Carroll (Eds.), *Helping children at home and school II: Handouts for families and educators*. Bethesda, MD: National Association of School Psychologists.
- Centers for Disease Control and Prevention (CDC). (2012). *Suicide: Risk and protective factors*. Retrieved from
<http://www.cdc.gov/ViolencePrevention/suicide/riskprotectivefactors.html>
- Centers for Disease Control and Prevention (CDC). (2013). *Suicide: Facts at a glance*. Retrieved from
<http://www.cdc.gov/violenceprevention/pdf/suicide-datasheet-a.pdf>

- Ciffone, J. (2007). Suicide prevention: An analysis and replication of a curriculum-based high school program. *Social Work, 52*(1), 41-9.
- Cigularov, K., Chen, P., Thurber, B., & Stallones, L. (2008). What prevents adolescents from seeking help after a suicide education program? *Suicide & Life-Threatening Behavior, 38*(1), 74-86. Retrieved from ProQuest Psychology Journals. doi: 1453661061
- Curtis, C. (2010). Youth perceptions of suicide and help-seeking: 'They'd think I was weak or "mental."' *Journal of Youth Studies, 13*(6), 699-715.
doi:10.1080/13676261003801747
- Cusimano, M.D. & Sameem, M. (2011). The effectiveness of middle and high school-based suicide prevention programmes for adolescents: A systematic review. *Injury Prevention, 17*, 43-49. doi:10.1136/ip.2009.025502
- de Leo, D., & Heller, T. (2008). Social modeling in the transmission of suicidality. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 29*(1), 11-19.
doi:10.1027/0227-5910.29.1.11
- Domino, G., Moore, D., Westlake, L., & Gibson, L. (1982). Attitudes toward suicide: A factor analytic approach. *Journal of Clinical Psychology, 38*(2), 257-262.
doi:10.1002/1097-4679(198204)38:2<257::AID
- Drapeau, C. W., & McIntosh, J. L. (for the American Association of Suicidology). (2015). U.S.A. suicide 2013: Official final data. Washington, DC: American Association of Suicidology.

Erbacher, T.A., Singer, J.B., & Poland, S. (2015). *Suicide in schools: A practitioner's guide to multi-level prevention, assessment, intervention, and postvention*. New York: Routledge.

Gilchrist, H., & Sullivan, G. (2006). Barriers to help-seeking in young people: Community beliefs about youth suicide. *Australian Social Work, 59*(1), 73-85. doi:10.1080/03124070500449796

Huberty, T. (2006). *Depression: Helping students in the classroom*. Retrieved from <http://www.nasponline.org/publications/cq/index-list.aspx>

Hung, N. C., & Rabin, L. A. (2009). Comprehending childhood bereavement by parental suicide: A critical review of research on outcomes, grief processes, and interventions. *Death Studies, 33*(9), 781-814. doi:10.1080/07481180903142357

Joe, S., Romer, D., & Jamieson, P. (2007). Suicide acceptability is related to suicide planning in U.S. adolescents and young adults. *Suicide and Life-Threatening Behavior, 37*(2), 165-178.

Joshi, S.V., Hartley, S.N., Kessler, M., & Barstead, M. (2015). School-based suicide prevention: Content, process, and the role of trusted adults and peers. *Child and Adolescent Psychiatric Clinics of North America, 24*, 353-370. doi: 10.1016/j.chc.2014.12.003

Kalafat, J., Madden, M., Haley, D., & O'Halloran, S. (2007). Evaluation of Lifelines classes: A component of the school-community based Maine Youth Suicide Prevention Project. Report for NREPP. Unpublished manuscript.

- Katz C., Bolton, S-L., Katz, L.Y., Isaak, C., Tilston-Jones, T., Sareem, J., & Swampy Cree Suicide Prevention Team. (2013). A systematic review of school-based suicide prevention programs. *Depression and Anxiety, 30*, 1030-1045. doi: 10.1002/da.22114
- King, K., Strunk, C., & Sorter, M. (2011). Preliminary effectiveness of Surviving the Teens suicide prevention and depression awareness program on adolescents' suicidality and self-efficacy in performing help-seeking behaviors. *Journal of School Health, 81*(9), 581-590. doi:10.1111/j.1746-1561.2011.00630.x
- Klein, D.N., Kujawa, A.J., Black, S.R., & Pennock, A.T. (2013). Depressive disorders. In Beauchaine, T.P. & Hinshaw, S.P. (Eds.), *Child and Adolescent Psychopathology* (2nd ed.) (pp. 543-575). Hoboken, NJ: John Wiley & Sons.
- Klimes-Dougan, B., Klingbeil, D. A., & Meller, S. J. (2013). The impact of universal suicide prevention programs on the help-seeking attitudes and behaviors of youths. *Crisis: The Journal of Crisis Intervention and Suicide Prevention, 34*(2), 82-97. doi:10.1027/0227-5910/a000178
- Kodaka, M., Poštuvan, V., Inagaki, M., & Yamada, M. (2011). A systematic review of scales that measure attitudes toward suicide. *International Journal of Social Psychiatry, 57*(4), 338-361. doi:10.1177/0020764009357399
- Kratochwill, T. R., & Stoiber, K. C. (2002). Evidence- based interventions in school psychology. Conceptual foundations of the Procedural and Coding Manual of Division 16 and the Society for the Study of School Psychology. *School Psychology Quarterly, 17*, 341– 389.

- Lam, W.M. (2014). In their own words: Perceived experiences and family functioning of suicide survivors before and after suicide loss. *PCOM Psychology Dissertations*. Paper 308.
http://digitalcommons.pcom.edu/psychology_dissertations/308
- Leiberman, R., Poland, S., & Cowan, K. (2006). Suicide prevention and intervention. Retrieved from:
<http://www.nasponline.org/resources/principals/Suicide%20Intervention%20in%20Secondary%20Schools%20NASSP%20Oct%202006.pdf>
- Leite, A., Idzelis, M., Reidenberg, D., Roggenbaum, S., & LeBlanc, A. (2011). *Linking Education and Awareness of Depression and Suicide (LEADS): An evaluation of a school-based suicide prevention curriculum for high school youth*. St. Paul, MN: Wilder Research.
- Miller, D. N., Eckert, T. L., & Mazza, J. J. (2009). Suicide prevention programs in the schools: A review and public health perspective. *School Psychology Review*, 38(2), 168-188.
- Moskos, M. A., Olson, L., Halbern, S. R., & Gray, D. (2007). Utah youth suicide study: Barriers to mental health treatment for adolescents. *Suicide and Life-Threatening Behavior*, 37(2), 179-186. doi:10.1521/suli.2007.37.2.179
- National Research Council. 2002. *Reducing suicide: A national imperative*. National Academies Press.
- Naylor, P. B., Cowie, H. A., Walters, S. J., Talamelli, L., & Dawkins, J. (2009). Impact of a mental health teaching programme on adolescents. *British Journal of Psychiatry*, 194(4), 365-370. doi:10.1192/bjp.bp.108.053058

- Niederkrötenhaler, T., Reidenberg, D., Till, B., & Gould, M. (2014). Increasing help-seeking and referrals for individuals at risk for suicide by decreasing stigma: The role of the mass media. *American Journal of Preventative Medicine*, *47*(3s2), 235-243.
- Pandey, G. N. (2013). Biological basis of suicide and suicidal behavior. *Bipolar Disorders*, *15*, 524-541.
- Pennsylvania Department of Education. (2012). *Academic achievement report*. Retrieved from <http://paayp.emetric.net/District/Overview/c67/112679403>.
- Pennsylvania Department of Education. (2014). *Pennsylvania school performance profile: York Suburban Middle School*. Retrieved from <http://paschoolperformance.org/Profile/5291>
- Pennsylvania Department of Education (PDE). (2015). *Model youth suicide awareness and prevention policy*. Retrieved from <http://www.education.pa.gov/K-12/Safe%20Schools/Pages/Act-71.aspx#.VbvA7flVikp>
- Pouliot, L., & de Leo, D. (2006). Critical Issues in Psychological Autopsy Studies. *Suicide and Life-Threatening Behavior*, *36*(5), 491-510.
doi:10.1521/suli.2006.36.5.491
- Rudd, M. D., Goulding, J. M., & Carlisle, C. J. (2013). Stigma and suicide warning signs. *Archives of Suicide Research* *17*(3), 313-318.
- Salander-Renberg, E., & Jacobsson, L. (2003). Development of a questionnaire on attitudes towards suicide (ATTS) and its application in a Swedish population. *Suicide and Life Threatening Behavior*, *33*(1), 52-64.
doi:10.1521/suli.33.1.52.22784

- Schilling, E., Lawless, M., Buchanan, L., & Aseltine, R. H. (2014). "Signs of Suicide" shows promise as a middle school suicide prevention program. *Suicide and Life-Threatening Behavior, 44*(6), 653-657.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2012). *Preventing suicide: A toolkit for high schools*. HHS Publication No. SMA-12-4669. Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration (SAMHSA). (2015). *National Registry of Evidence-Based Programs and Practices*. Retrieved from <http://www.nrepp.samhsa.gov/>
- Sudak, H., Maxim, K., & Carpenter, M. (2008). Suicide and stigma: A review of the literature and personal reflections. *Academic Psychiatry, 32*(2), 136-42. Retrieved from ProQuest Psychology Journals. (Document ID: 1446367021).
- Suicide Prevention Resource Center (2012). *The role of teachers in preventing suicide*. Retrieved from <http://www.sprc.org/sites/sprc.org/files/Teachers.pdf>
- Thomas, E. & Morgan, G. (2006, April). Tackling stigma in schools. *Mental Health Today, 30* –32. Retrieved from ProQuest Psychology Journals. (Document ID: 1035187271).
- U.S. Census Bureau. (2010). *State and county QuickFacts: East York CDP, Pennsylvania*. Retrieved from <http://quickfacts.census.gov/qfd/states/42/4222104.html>.

Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr. (2010). The interpersonal theory of suicide. *Psychological Review*, *117*(2), 575-600. doi:10.1037/a0018697

Vogel, D. L., Wade, N. G., & Hackler, A. H. (2007). Perceived public stigma and the willingness to seek counseling: The mediating roles of self-stigma and attitudes toward counseling. *Journal of Counseling Psychology*, *54*(1), 40-50.
doi:10.1037/0022-0167.54.1.40

Walker, R., Ashby, J., Hoskins, O., & Greene, F. (2009). Peer-support suicide prevention in a non-metropolitan U.S. community. *Adolescence*, *44*(174), 335-46. Retrieved from ProQuest Psychology Journals. (Document ID: 1862972621)

York Suburban School District. (2013). *2012-2013 annual report*. Retrieved from <http://www.yssd.org/OurDistrict/CurriculumInstructionAssessment.aspx>.

Zenere, F.J. & Lazarus, P.J. (2009). The sustained reduction of youth suicidal behavior in an urban, multicultural school district. *School Psychology Review*, *38*(2), 189-199.

Appendices

Appendix A

GENDER: M, F, Other

Adolescent Attitudes Toward Suicide, Stigma, and Help-Seeking Behavior

Please answer the following questions using a score of 1 to 5. A score of 1 indicates strong disagreement with the item, while a score of 5 indicates strong agreement with the item.

1. Suicide can never be justified.

1	2	3	4	5
Strongly Disagree				Strongly Agree

2. There is a risk to bring about suicidal thoughts in a person if you ask about it.

1	2	3	4	5
Strongly Disagree				Strongly Agree

3. Suicide is a subject that one should not talk about.

1	2	3	4	5
Strongly Disagree				Strongly Agree

4. Suicide can be prevented.

1	2	3	4	5
Strongly Disagree				Strongly Agree

5. I would feel ashamed if a member of my family completed suicide.

1	2	3	4	5
Strongly Disagree				Strongly Agree

6. People who complete suicide are weak.

1	2	3	4	5
Strongly Disagree				Strongly Agree

29. In my school, I would feel most comfortable talking to this adult:

- Teacher**
- Principal**
- School counselor**
- School psychologist**
- School nurse**
- Coach**
- Other**

Appendix B

Dear Parent/Guardian,

As you may or may not be aware, Pennsylvania recently signed into law Act 71, which mandates that school districts develop an age-appropriate youth suicide awareness and prevention policy in order to promote the safety and well-being of students. In response to this law, York Suburban's District School Psychologist, Julia Hollinger, will be conducting a survey on adolescent attitudes toward suicide with seventh grade students during the 2015-2016 school year. Mrs. Hollinger is a Nationally Certified School Psychologist as well as a Certified School Suicide Prevention Specialist through the American Association of Suicidology. She has professional experience with school-based suicide prevention, risk assessment, intervention, and postvention. The survey will be conducted as part of students' mandatory Health class, the curriculum for which will cover the Three Parts of Good Health: Physical, Social, and Mental/Emotional Health. The information gleaned from the survey will be used by the district to further develop and strengthen our youth suicide prevention efforts.

As your child is under the age of the 18, your consent is required in order for him or her to participate in the survey. Enclosed you will find an Informed Consent Form, which further describes the details of the survey. Please read and return the signed consent form to your child's Health instructor by **WEDNESDAY, AUGUST 26, 2015**. If a signed consent form is not received for your child, he or she will not be permitted to participate.

Please feel free to contact Mrs. Hollinger or Dr. Scott Krauser, Principal, at any time should you have any questions or concerns.

Sincerely,

Julia M. Hollinger, Ed.S, NCSP
School Psychologist
York Suburban School District
717-885-1270 ext. 8240
jhollinger@yssid.org

Appendix C

INFORMED CONSENT FORM

SURVEY TITLE: Adolescent Attitudes Toward Suicide, Stigma, and Help-Seeking Behavior

PURPOSE: The purpose of the survey is to find out what seventh grade adolescents think about suicide, including their attitudes toward and perceptions of suicide, how these attitudes may relate to or create stigma, as well as attitudes toward seeking help for suicidal thoughts or behaviors. This information will be used by the district to further develop and strengthen youth suicide prevention efforts.

DESCRIPTION: Your child is being asked to complete a brief survey, which will be administered one time during their Health class. The survey will be administered online and should take no longer than 30 minutes. Your child’s participation in the survey is completely voluntary and anonymous. Your child may opt out of the survey at any time without consequence, including penalty to his or her grade for Health class.

If your child has any questions or problems during the survey, your child can ask Mrs. Julia Hollinger, School Psychologist, who will be on site during the entire survey administration period. Due to the sensitive nature of the survey, Mrs. Hollinger will be debriefing the class as a whole before the survey and will also be available for individual debriefing after the survey for any student in need.

CONFIDENTIALITY: Signed consent forms will be kept in a locked file. The survey is anonymous; gender is the only demographic information required. Signed consent forms and surveys will not be able to be linked. Electronic data will be password-protected.

If you have any questions at any time, please contact:

Julia Hollinger, School Psychologist
717-885-1270 ext. 8240
jhollinger@yssd.org

OR

Dr. Scott Krauser, Principal
717-885-1260
skrauser@yssd.org

I have had adequate time to read this form and I understand its contents.

I agree to allow my child to participate in this survey.

CHILD’S NAME: _____

PARENT/GUARDIAN SIGNATURE: _____

DATE: _____

Appendix D

Research Question- Survey Item Association

RESEARCH QUESTION	ASSOCIATED SURVEY ITEMS
What are some of the attitudes and perceptions that youth have that may contribute to stigma surrounding suicide and suicidal behavior?	1, 5, 6, 8, 12, 14, 17, 19, 20, 21, 25
Sub-question: How knowledgeable are adolescents about facts surrounding suicide and suicidal behavior? (Literacy)	7, 10, 16, 22, 28
How do these attitudes and perceptions influence adolescents' willingness to seek help for self or others?	3, 9, 13, 15, 23, 24, 27
What are adolescents' views on seeking help for self or others with regard to suicide and suicidal behavior?	2, 4, 11, 18, 26, 29
Are there differences in attitudes and perceptions of stigma, suicide literacy, or help-seeking behavior between males and females?	N/A

Appendix E

Survey Item- Source Association

SURVEY ITEM	SOURCE
Suicide can never be justified.	ATTS
There is a risk to bring about suicidal thoughts in a person if you ask about it.	ATTS
Suicide is a subject that one should not talk about.	ATTS
Suicide can be prevented.	ATTS
I would feel ashamed if a member of my family committed suicide.	SOQ
People who complete suicide are weak.	SOQ
People who complete suicide are usually mentally ill.	SOQ
There may be situations where the only reasonable solution is suicide.	SOQ
People who attempt suicide should be required to go to therapy to understand why.	SOQ
Suicide attempters are more interested in getting attention.	SOQ
If someone wants to complete suicide, it is their business and we should not interfere.	SOQ
Those who complete suicide are cowards who cannot face life's challenges.	SOQ
If I were experiencing major distress, I would feel comfortable talking to my school counselor.	Researcher-created item
I would consider the possibility of taking my life if I were to suffer from a severe, incurable, disease.	ATTS
I am prepared to help a person in a suicidal crisis by making contact.	ATTS

The suicide rate is higher for blacks than for whites.	SOQ
People with incurable diseases should be allowed to complete suicide in a dignified manner.	SOQ
It's rare for someone who is thinking about suicide to be dissuaded by a "friendly ear."	SOQ
Suicide is a normal behavior.	SOQ
Suicide is a very serious moral transgression.	SOQ
Potentially, every one of us can be a suicide victim.	SOQ
People who are at high risk for suicide can be easily identified.	SOQ
I would not voluntarily participate in suicide prevention activities at my school.	Researcher-created item
I would be afraid that my parents or friends might believe that I am thinking about suicide if I participate in suicide prevention activities at my school.	Researcher-created item
Suicide and suicide prevention are not things that should be discussed at school.	Researcher-created item
Suicide prevention activities at school are only for students that are thinking about suicide.	Researcher-created item
If I knew a peer was possibly having suicidal thoughts, I would report my concerns to an adult.	Researcher-created item
I know the warning signs of suicide.	Researcher-created item
In my school, I would feel most comfortable talking to this adult: <ul style="list-style-type: none"> - Teacher - Principal - School counselor - School psychologist - School nurse - Coach - Other 	Researcher-created item