5-2012

School-Based Adolescent Suicide Reduction

Sabrina Ulrich

St. Catherine University

Recommended Citation

Ulrich, Sabrina. (2012). School-Based Adolescent Suicide Reduction. Retrieved from Sophia, the St. Catherine University repository website: https://sophia.stkate.edu/msw_papers/97

This Clinical research paper is brought to you for free and open access by the School of Social Work at SOPHIA. It has been accepted for inclusion in Master of Social Work Clinical Research Papers by an authorized administrator of SOPHIA. For more information, please contact amshaw@stkate.edu.
School-Based Adolescent Suicide Reduction

Submitted by Sabrina M. Ulrich
May 11, 2012

MSW Clinical Research Paper

The Clinical Research Project is a graduation requirement for MSW students at St. Catherine University/University of St. Thomas School of Social Work in St. Paul, Minnesota and is conducted within a nine-month time frame to demonstrate facility with basic social research methods. Students must independently conceptualize a research problem, formulate a research design that is approved by a research committee and the university Institutional Review Board, implement the project, and publicly present their findings. This project is neither a Master’s thesis nor a dissertation.

School of Social Work
St. Catherine University & University of St. Thomas
St. Paul, Minnesota

Committee Members:
David Roseborough, Ph.D., LICSW (Chair)
Heidi Critchley, MS, Ed.S.
Deann Reese, MSW, LICSW
Abstract

ST. CATHERINE UNIVERSITY AND
THE UNIVERSITY OF ST. THOMAS
MSW PROGRAM

School-Based Adolescent Suicide Reduction

By Sabrina Ulrich

Research Committee:       Chair:  David Roseborough, Ph.D., LICSW
Members:  Heidi Critchley, MS, Ed.S.
          Deann Reese, MSW, LICSW

Abstract

Adolescents spend the majority of their waking hours at school which provides schools with the opportunity and means to access and reach students for school-based adolescent suicide reduction. Schools offer adult supervision and potential monitoring of adolescent behavior and mental health. The purpose of this study was to examine school social workers’ beliefs and efforts in relation to school-based adolescent suicide reduction and to explore prevention strategies, risk factors, and protective factors to help primary, middle, and secondary schools reduce suicide ideation and behavior. This research asked what schools can do to reduce the number of adolescent students who die by suicide. The Developmental Assets Framework by Search Institute was utilized for the conceptual framework as this asset-building approach promotes positive youth development. Studies show the more assets a child or adolescent has the more likely they will do well and they are less likely to engage in at-risk behaviors. A mixed method was utilized including a quantitative survey and qualitative interviews. Utilizing a convenience sample, a survey was sent to approximately 181 school social workers from the Minnesota School Social Work Association (MSSWA). Additionally, a school social worker and school counselor were interviewed. The surveys and interviews revealed the importance of utilizing prevention strategies, identifying and reducing risk factors, and identifying and enhancing protective factors which validated the research found in a literature review. The data also revealed that schools can and should provide mental health and suicide screenings, form connections with students, and educate students, staff, and gatekeepers about warning signs of suicide along with information regarding risk factors and protective factors of suicide. Additionally, the research showed schools can and should work with parents and the community to educate them about mental health and suicide to work together to support students. The data also suggested schools can increase awareness of mental health and suicidality and increase communication among students, staff, parents, and the community regarding suicide awareness. Strengths of this study included the sampling and data collection from across Minnesota and it sampled an entire professional organization. The study also included interviews which added richness and depth and the professionals interviewed are key stakeholders with experience in adolescent suicidality. Limitations of this study are that it only collected data from one state and the sample was not representative of all professionals who work with adolescent suicide in a school
setting. Additionally, the sample of interviewees was small and interviewees were selected to take part in study by researcher. Implications from this study show the significance for social work practice in the school setting to train and educate staff and students about mental health and suicide and to reduce the stigma that is associated with both. Implications also point to the importance of implementing comprehensive kindergarten – 12th grade mental health curriculums, suicide prevention programs and strategies, and school-wide mental health and suicide screenings. Furthermore, implications assert the significance of decreasing risk factors and the value of enhancing protective factors with students as early as possible in the students’ elementary years. Factors identified and discussed in this study can be utilized for future practice and as a basis for school involvement in the reduction of adolescent suicide. This study found school social workers support the importance of school-based efforts to reduce the number of adolescents who die by suicide.

St. Catherine University and the University of St. Thomas
Acknowledgements

I would like to thank the many kind people in my life who have supported, encouraged, and strengthened me throughout this clinical research year. Although adolescent suicide was a very heavy and intense topic to be absorbed by for nine months, the information I obtained and the overall learning experience has been invaluable. I am deeply appreciative and feel very blessed to have been so supported during this year of research, writing, and personal and professional growth.

It would not have been possible to complete this clinical research project without the tremendous support of my husband, Chris. Above all, I am most thankful for his patience, understanding, and continuous encouragement. Thank you to my family, friends, classmates, and coworkers for providing me with your words of support and encouragement through emails, texts, and phone calls. I wish to express my warm and sincere gratitude to all of you for your support.

I am deeply grateful to my professor and research chair, Dr. David Roseborough, who has supported me with his unending encouragement, vast knowledge, advice, patience, and incredible insight. I could not have asked for a better chair for my research project and I am extremely thankful for his guidance. I would also like to thank my other committee members, Heidi Critchley and Deann Reese, for their direction, advice, and support. I am sincerely grateful that you shared your expertise, insight, and knowledge with me. You helped make this project a very positive and rich experience.

Thank you to the president of Minnesota School Social Work Association, Tammie Knick, members of MSSWA for their survey responses, and the interview participants who took the time to share their immense knowledge and valuable experience with me.
We need to talk more about problem-solving and how to develop resiliency. Suicide is an impulsive act and one that seems to happen when people think they don’t have any way out. We need to begin talking to students at an early age about how to address problems including difficult ones. We also need to talk to students about how feelings are transient. We can feel horrible in the moment, but not as bad later. Sometimes it’s a matter of minutes until we feel better. I have to say that suicide happens in those moments when people feel so horrible they see no way out. We need to front-load students to understand that there is almost always a way out (declared in an interview with a school social worker.)
Table of Contents

Abstract ............................................................................................................. ii
Acknowledgements .............................................................................................. iii
Quote ..................................................................................................................... iv
Table of Contents ................................................................................................... v
Introduction .......................................................................................................... 1
Literature Review ................................................................................................... 10
Conceptual Framework ......................................................................................... 18
Methodology .......................................................................................................... 22
Findings .................................................................................................................. 28
Discussion .............................................................................................................. 49
References ............................................................................................................. 62
Appendices ............................................................................................................ 64
  A. Agency Consent Form ...................................................................................... 64
  B. Letter of Consent ............................................................................................ 67
  C. Consent Form .................................................................................................. 68
  D. Survey Questions ........................................................................................... 71
  E. Interview Questions ........................................................................................ 73
  F. Resources for Support ..................................................................................... 75
School-Based Adolescent Suicide Reduction

Each year, more than 5,000 teenagers die by suicide in the United States. Suicide was the 6th leading cause of death for 5–14 year olds, and the third leading cause of death for 15-24 year olds in the United States (American Academy of Child & Adolescent Psychiatry, 2010). Suicide is a chronic and complex problem with more than 30,000 Americans dying by suicide annually. Adolescents are at an increased risk of suicide as young people are often impulsive and do not give thought to the permanence of death as their brains are not fully developed until the mid-twenties.

The risk of adolescent suicidality is not evenly distributed. Males ages 15-19 years old are four times more likely to die by suicide than are females, however females are more likely to attempt suicide. Young people, with an especially high rate of Hispanic adolescents (Waldvogel, Rueter, and Oberg, 2008), along with Caucasian and Native American adolescent males (Capuzzi, 2009), are at particular risk of suicidal behavior. Gay, lesbian, bisexual, transsexual, and youth questioning their sexual identity are also at particular risk as are adolescents with substance use issues. At some point in their adolescent years, Waldvogel, Rueter, and Oberg (2008) describe an estimated 20-25% of adolescents report suicidal ideations and 18% of 6th grade students (11-12 years old) reported they considered killing themselves. Although it does not mean they will all attempt suicide, it does show the need for concern and preventative efforts. Efforts have begun to be made to understand and to prevent it.

Schools offer one such avenue for intervention in that adolescents spend the majority of their waking hours at school. The school setting provides the opportunity and means to access and reach students for suicide prevention. School is an important social context with adult supervision and potential monitoring of adolescent behavior and mental health.
School-Based Adolescent Suicide Reduction

Through education and prevention, screening, and early intervention, mental health issues and suicidal ideation and behavior can be identified, treated, and decreased. There is great importance for social work practice in the schools to train and educate staff and students about mental health and suicide. The purpose of this study is to examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide.

Special attention was given to prevention strategies as I examined schools’ actual and potential roles in providing suicide prevention programs, school-wide mental health and suicide screening, identifying risk factors, and enhancing protective factors for suicide prevention. This study examined the importance of suicide prevention programs, school-wide mental health and suicide screening, the significance of increasing awareness about risk factors and warning signs, and the value of enhancing protective factors with students as early as possible in the student’s elementary years at school. The focus of this study was to examine preventative programs, risk factors, and protective factors to help primary, middle, and secondary schools reduce suicide ideation and behavior. Findings from this study will ideally help school social workers and school officials identify some of the primary factors identified and discussed in this study as a basis for school involvement in the reduction of adolescent suicide. This research asked what schools can do to reduce the number of adolescent students who die by suicide.

Implications from this study asked about the importance for social work practice in the schools to train and educate staff and students about mental health and suicide and to reduce the stigma that is associated with both. This study explored the importance of suicide prevention programs, school-wide mental health and suicide screening, the
School-Based Adolescent Suicide Reduction

significance of increasing awareness about risk factors, and the value of enhancing protective factors with students as early as possible in the student’s elementary years, from the perspective of a sample of Minnesotan school social workers. Implications from this study include the potential factors identified and discussed in this study may be utilized as a basis for school involvement in the reduction of student suicide.
School-Based Adolescent Suicide Reduction

**Literature Review**

A literature review was completed to examine what schools can do to reduce the number of students who die by suicide. This review will provide a comprehensive overview of primary prevention strategies for reducing student suicide. The research presented supports suicide reduction through prevention strategies such as educational programs and screening, knowledge of and reduction of risk factors and warning signs, and knowledge of and enhancement of protective factors that can reduce the number of students who die by suicide.

**Demographic Factors**

Riesch, et al (2008) illustrated 18% of 11-12 year old students nationwide in 6th grade reported they had thought of killing themselves. In the United States, the reported suicide rate of 5-14 year old children was .8 per 100,000, or approximately 302 suicides in 1996. In 2002 it was reported that 196, 10-14 year old males died by suicide and 64, 10-14 year old females died by suicide. In 2004, 4,599 people ages 10-24 died by suicide in the United States. Suicide risk and occurrence in the United States and worldwide is higher among Euro-American groups than other ethnic or racial groups. Suicide completion is higher in males than female (SAVE, 2011), however girls are more likely to attempt suicide than are boys, but females are often less successful to complete as they frequently utilize less lethal methods than do boys.

**Prevention Strategies**

The literature review examined strategies to reduce the chances that an adolescent would attempt suicide. The American Academy of Child and Adolescent Psychiatry (2010) suggested school-based programs promoting mental health and comprehensive
School-Based Adolescent Suicide Reduction

Interventions have been shown to decrease suicides and suicide attempts over time. Schools have the opportunity and means to access and reach students as they are the place where adolescents spend the majority of their day outside of their home. Although schools have limitations and there are many factors outside of school that affect and influence students, schools can get involved with high risk students. Students at risk are adolescents who may be at higher risk of suicidality due to interpersonal, environmental, demographic or situational factors, pre-existing mood disorders, and substance abuse issues. Nell and Salvatore (2011) illustrate risk factors are characteristics that are associated with or lead to increased odds of a suicide attempt or completion. Prevention strategies are programs or curricula that seek to decrease risk factors and/or enhance protective factors to reduce the probability of a student suicide attempt. Protective factors are characteristics that reduce the odds of a suicide attempt or completion. Suicide ideations are thoughts of suicide that can include the planning of a suicide attempt (Nell and Salvatore, 2011). Schools can provide prevention strategies, increase awareness of risk factors, and strengthen protective factors to reduce suicide ideation and the number of students who die by suicide (Lieberman, Poland and Cowan, 2006).

Lieberman, Poland and Cowan (2006) promote the responsibility of schools to implement suicide prevention programs and emphasize the importance of reaching students who have mental health disorders such as depression or anxiety in addition to students who are at-risk of suicidal behavior.

Waldvogel, Rueter & Oberg (2008) examined prevention strategies to reduce the chances an adolescent will attempt suicide. They focused on a continuum and three tiers of prevention that increase the awareness of and referrals of suicidal adolescents focusing
School-Based Adolescent Suicide Reduction


This study will focus on primary and secondary prevention which increases knowledge about suicide for adolescents, the public, and people who care for these children. Primary preventative measures include restriction of lethal means used for suicide, skill building, and suicide awareness (Waldvogel, Rueter & Oberg, 2008).

Restriction of lethal means includes programs or activities that restrict adolescents’ access to lethal means for suicide, especially handguns. With restrictions to handguns, which are used in half of completed adolescent suicides, they may turn to less lethal means which may increase their chances of survival (Waldvogel, Rueter & Oberg, 2008).

Enhancing skills may be a beneficial accompaniment to suicide awareness programs and may be accepted more easily than suicide prevention programs due to concern of suicide contagion (Waldvogel, Rueter & Oberg, 2008). Additionally, life skills enhancement emphasizes increasing problem-solving, coping, communication, and stress management skills, self-efficacy, self-esteem, and healthy behaviors which increase resiliency in students. In addition to progress in areas of coping, cognitive abilities and problem solving, this study found a decrease in both suicide attempts and suicide completion. The study stressed involving children’s parents and that skill-based programs should be implemented early in children’s development (Waldvogel, Rueter & Oberg, 2008). Gould, Klomek, and Sourander (2011) illustrated a suicide prevention program that enhances protective factors associated with adolescent suicide risk. The
School-Based Adolescent Suicide Reduction

*Sources of Strength* program involves peer leaders and enhances connectedness between trusted, caring adults and adolescents. The purpose of the school-based program is also to increase help seeking behaviors and to build support for individuals so that they have strengths to rely on when students have issues or difficulties. After three months of “school-wide messaging” between the peers and adults, they found changes in the school norms throughout the entire population of high school students.

Suicide awareness includes school-based programs that educate students about warning signs of suicide and increase their understanding about suicidal behavior and recognition of symptoms. Education includes how to identify at-risk peers, where to seek help for themselves or at-risk peers and educating them about community resources. Education also serves to reduce the stigma associated with suicidal behavior and mental health. This study identified benefits of suicide awareness; however it does suggest that a curriculum-based prevention program combined with school wide screening would be the most beneficial (Waldvogel, Rueter & Oberg, 2008).

Secondary prevention identifies adolescents who are at risk of suicidal behaviors and intervenes to reduce and/or eliminate suicide through suicide and mental health screening, gatekeeper training, and media education (Waldvogel, Rueter & Oberg, 2008). The American Academy of Child & Adolescent Psychiatry (2010) reported that a school-based intervention such as a mental health screening which administers a standardized questionnaire is a beneficial strategy for suicide prevention by screening for depression, suicidal ideations, or past suicide attempts. Screening students for symptoms of mental illness or suicidality as a school-based intervention has great potential to provide interventions for students who are at risk (AACAP, 2010).
Gatekeeper training educates community members who have regular contact with adolescents such as health care providers and school staff. Training provides knowledge regarding suicidal risk, skills to identify suicidal behavior, establishing levels of risk and how to make referrals to care providers as needed. In addition to screening and gatekeeper training, educating media personnel about their role in informing the public about risk factors, resources, and other information about suicide is vital. They can help reduce the stigma about mental illness and suicidal behavior by providing information and facts about mental health and suicide. It is also important to educate the media about their role in minimizing the effects of suicide contagion by not glamorizing or depicting it in a positive way (Waldvogel, Rueter & Oberg, 2008).

**Risk factors**

Risk factors generally contribute to long-term risk and may increase both the likelihood of and contribute to adolescent suicide ideation, attempted suicide, or death by suicide. Gould, Klomek, and Sourander (2001) report that reducing risk factors of suicide provides effective prevention and should be the main focus of prevention. The Suicide Prevention Resource Center (2011) indicated a high risk for suicide is usually found in a combination or group of multiple risk factors. They found the significance of specific risk and protective factors can vary among different communities and individuals and that not all risk and protective factors are equal. They also found some risk factors to hold much significance while some were shown to significantly increase risk for suicidal behavior depending upon the individual.

Nell and Salvador (2011) examined risk factors of suicide and found that seeking help is sometimes hindered by stigma that is associated with mental illness, suicide, or shame.
School-Based Adolescent Suicide Reduction

from past suicidal attempts. They found that many people who attempted suicide had a history of family members who attempted or completed suicide; a history of physical, sexual, or psychological abuse; alcohol or substance abuse; or a lack of support from and connections with family, peers, or the community. Risk factors also include persisting mood disorders or psychiatric symptoms such as depression, anxiety, and panic and they additionally found a high-risk period after being hospitalized for a prior suicide attempt (Nell and Salvatore, 2011). The Harvard Medical Family Health Guide (2008) reported that two-thirds of adolescents who had attempted suicide had both a history of substance abuse and a psychiatric disorder. The combination of drugs or alcohol and depression is particularly dangerous. Nell and Salvatore summarized these suicide risk factors by the mnemonic UNSAFE:

- **Unconnected** – no support; sense of not belonging or being a burden
- **Nonadherence** — unmanaged mental illness or co-occurring disorders
- **Stigma/shame related to past attempts or suicidal behavior**
- **Abuse history and/or alcohol misuse; prior attempt**
- **Family history of suicide or suicide attempts**
- **Exacerbations** — worsened mental illness; hospitalizations

Waldvogel, Rueter, and Oberg (2008) categorize risk factors for suicide into three categories; individual, familial, and sociodemographic. They point to stressors in the adolescent’s life that are associated with suicide ideations such as peer pressure, loss of a romantic relationship, troubled family relationships, disciplinary problems, poor academics, negative peer relationships, and drug or alcohol use.
Individual risk factors which may influence suicidal behavior include health risks such as alcohol use and substance abuse, and access to weapons (Riesch et al. 2008); gender, sexual orientation, prior suicide attempts, cognitive thought processes such as poor self-esteem, feelings of hopelessness or worthlessness, poor self-efficacy, pessimism about the future, and how they react to and cope with stress (Waldvogel, Rueter & Oberg, 2008). The Movement Advancement Project (2011) found LGBT youth report higher rates of bullying and anti-LGBT harassment than do youth who are heterosexual. Their research showed that persistent bullying and harassment can contribute to suicidal behavior leading to or worsening feelings of depression, anxiety, exclusion, isolation, rejection, and despair. Gould, Klomek, and Sourander (2011) indicate childhood and adolescent bullying and cyberbullying behavior have been associated with depression, suicidal ideation, and suicide attempts in elementary, middle and high school students. They found victims of bullying had more depressive symptoms, high levels of suicidal ideation, and were more likely to attempt suicide than were nonvictims of bullying. Both the perpetrators and the victims were at high risk for suicidal ideation and behavior. They found both peer victimization and bullying along with existing comorbidity of psychopathology were cause for concern as they were serious risk factors for later suicidality. Gould, Klomek, and Sourander (2011) advocate that there is always hope to end the bullying and cyberbullying and adolescents need to be taught skills and empowered to stop the situation.

Waldvogel, Rueter & Oberg (2008) found pre-existing mood disorders such as depression and anxiety, substance abuse disorders, and antisocial behaviors; personality traits such as introversion, impulsivity, aggression, hopelessness, external locus of
School-Based Adolescent Suicide Reduction

control, and high levels of neuroticism; family history and biology were also found to be risk factors. Life stressors such as sexual or physical abuse may be compounded by additional factors of social isolation, lack of social skills, and antagonistic behaviors. Lieberman, Poland and Cowan (2006) and Riesch et al. (2008) point to life pressures that put adolescent students at risk for suicide. Intra-personal factors such as ways of coping and managing problems are also individual factors that influence student’s vulnerability for suicidal risk and physical characteristics such as pubertal development and maturity.

Also influencing vulnerability for suicidal risk are interpersonal factors such as a student’s relations with peers, their ease of making friends, peer networks, and school connectedness. A lack of close friends, difficulty making new friends and interpersonal isolation were found to be significant risk factors associated with suicidal behavior. The school climate, school violence, bullying behavior or victimization of bullying, low educational expectations and aspirations by students’ mothers were also found to be linked to suicide ideation.

Students having peers with suicidal ideations or attempts, or peers who completed suicide were also more likely to be suicidal, have substance abuse problems, or be depressed (Riesch et al. 2008). They also found the death of an adolescent or the association with friends who have attempted or completed suicide may increase the depression of their peers and may lead to increased suicidal behavior in the group (Waldvogel, Rueter & Oberg, 2008). Adolescents who feel less connected to their schools are at increased risk of suicide. Adolescents who use more internalizing behaviors such acting sad, having low self-esteem, experiencing social anxiety or isolative behaviors along with students who believe they should be able to take care of
their problems without any help from other people and should keep their feelings to themselves are at increased risk of suicide (Riesch et al. 2008).

Secondly, familial risk factors in adolescent suicidality include families with heightened parent-child conflict and families experiencing power struggles. Families prone to crises with poor problem solving abilities and having issues adapting to change also increase the suicide risk for students. Families with disorganized or poor family functioning, having poor family cohesion, those whose families were enmeshed or characterized as emotionally disengaged, families who experienced serious fights with family members, and those with parental problems involving the police were found to be at increased risk for adolescent suicide attempts (Riesch et al, 2008). Loss of a parent through death or divorce or living apart from one or both of their biological parents; less satisfying and less frequent communication with parents; parental psychopathology including antisocial behavior, depression, and substance abuse were found to be interpersonal risk factors. They also found that family history of attempted or completed suicide increases the risk for suicidal behavior because of the suicidal behavior that is modeled and learned (Waldvogel, Rueter & Oberg, 2008).

Lastly, sociodemographic factors such as environmental and demographic factors were also examined by Waldvogel, Rueter & Oberg (2008). They found students with low socioeconomic status and socially disadvantaged backgrounds increased the odds of adolescent suicide attempts (Waldvogel, Rueter & Oberg, 2008). Multiple types of maltreatment and the continuous and severity of physical abuse was found to be a risk factor for suicide ideation. Social isolation from frequent transitions in an adolescent’s living situation and adolescents witnessing violence were found to be related to suicide
ideation (Riesch, 2008). Demographic factors such as problems at work or school along with suicide contagion are also found to be related to suicide. Suicide contagion is a process by which exposure to a suicide or suicidal behavior influences others to commit or attempt suicide. Suicide contagion can often be linked to media coverage and also increase suicidal behavior among adolescents (Waldvogel, Rueter & Oberg, 2008).

There are immediate stressors that may create a “tipping point” for individuals considering suicide. These tipping points may push a person considering suicide over the edge or be a final straw. These immediate stressors may include financial hardships, relationship problems or break-ups, legal difficulties, worsening medical prognosis, and public humiliation or shame (SPRC & Rogers, 2011).

**Warning signs**

The Suicide Prevention Resource Center, and Rogers (2011) indicate warning signs are sometimes confused with risk factors, however they are both very different. Risk factors signify that someone is at a higher risk for suicide whereas warning signs point to an immediate risk of suicide. Having knowledge of risk factors can help people understand what kinds of interventions and changes can be helpful in order to reduce suicide risk. Being educated about warning signs helps people know when someone is in imminent risk and in need of immediate help. Warning signs of that indicate a person is seriously contemplating suicide include dramatic mood change, hopelessness, increasing alcohol or drug use, seeking a means to kill oneself, or threatening to hurt or kill oneself (Suicide Prevention Resource Center, & Rodgers, 2011). The American Association of Suicidology (2009) and The American Academy of Child and Adolescent Psychiatry (2008) reported additional warning signs including someone writing or talking about
suicide, death or dying, participating in risky activities or acting reckless, and/or feeling like there is no way out or feeling trapped. They also found seeking revenge, withdrawing from society, family or friends, being unable to sleep, sleeping all the time, experiencing a change in eating habits, acting violently, behaving rebelliously, experiencing anger, rage, anxiety, agitation, or running away were warning signs. Feeling no sense of purpose in life or no reason for living; not tolerating praise or rewards; unusual neglect of personal appearance; marked personality change; difficulty concentrating; persistent boredom; decline in quality of schoolwork; loss of interest in pleasurable activities; or frequent physical complaints often related to emotions such as headaches, stomachaches, or fatigue were additionally found. Other signs may also include suddenly becoming cheerful after a time of depression, giving away their favorite possessions or important belonging, putting their affairs in order, having signs of psychosis such as bizarre thoughts or hallucinations. Adolescents may also give verbal hints by making statements such as “Nothing matters”, “I won’t be a problem for you much longer”, I won’t see you again”, “It’s no use” or blatantly stating “I’m going to commit suicide” or “I want to kill myself” (American Academy of Child and Adolescent Psychiatry, 2008).

**Protective factors**

Waldvogel, Rueter, and Oberg (2008) illustrate factors that may serve to protect against suicidality. They show the need for adolescents to have an adult they feel connected to, a safe person for support, assistance, and reassurance their feelings are not abnormal and there is help for what they are experiencing. Students’ connectedness to teachers and staff provide at-risk students with a relationship and the confidence to seek
School-Based Adolescent Suicide Reduction

out a trusted adult and for friends or peers of at-risk students to seek help (Lieberman, Poland, and Cowan, 2006). The Harvard Medical Family Health Guide (2008) promoted emotional connectedness with an adult at school as one of the main causes a student may come to an adult for help. School staff can build relationships with the student in very small ways through greeting the students, talking to them about life outside of school, or just even calling them by their name causes them to feel more emotionally connected with adults at school.

Along with improving social support, Wenzel and Beck (2008) emphasize one way to decrease the probability of suicidality is to increase reasons for living and decreasing hopelessness. They also pointed to increasing problem solving abilities and reducing impulsivity. Improving social support and increasing compliance with other services such as therapy and social services were also found to decrease suicidality.

Emphasis was given as well by Reisch et al (2008) to gatekeeper or in-service training to educate all school staff and students about warning signs of suicide, identification of at-risk students, recognition of suicidal behavior, and what to do and where to turn to for assistance (Joe and Bryant, 2007; Lieberman, Poland, and Cowan, 2006). The AACAP (2010) identified school-based interventions that included enhancing protective factors through parent education, teacher training, and life skills curricula such as stress management and coping skills for students.

Implementing depression screening was also identified as a protective factor for identifying suicidal ideation, depression, and past suicide attempts to help reduce suicidal and nonfatal suicide behavior (Lieberman, Poland, and Cowan 2006). Joe and Bryant
School-Based Adolescent Suicide Reduction

(2007) promoted that suicide screening could actually be more effective in suicide prevention than both preventative programs and in-service training (2007).

Nell and Salvatore (2011) also examined protective factors of suicide and looked at safety plans, compliance with care, and community, peer, and family support. They summarized these protective factors by the mnemonic SAFER:

- **Self-help skills, personal crisis/suicide prevention plan**
- **Adherence to treatment plan**
- **Family and community support**
- **Education about risk factors, warning signs, and triggers for suicide**
- **Recovery and resilience**

A review of the literature suggests there are significant interventions and programs schools can implement and carry out to help prevent student suicide through prevention strategies, assessment of risk factors and warning signs, and enhancement of protective factors. Interventions that help prevent suicide emphasize identifying risk and protective factors, specifically decreasing risk factors and increasing protective factors. SPRC and Rogers (2011) found that interventions are more likely to be effective if multiple factors are addressed such as combining the decreasing of risk factors and increasing of protective factors.

**Summary**

All of the studies examined found similar strategies schools can implement to help reduce student suicide through education, skill building, and school-wide screening for depression, suicide ideation and past suicidal attempts. All of the studies reviewed found common risk factors associated with adolescent suicide such as lack of connections,
School-Based Adolescent Suicide Reduction

abuse history, family history, mental illness, and intrapersonal and interpersonal factors. To enhance protective factors against adolescent suicide, all of the studies focused on forming connected relationships between students and adults at school, in the home, and in the community. The literature stressed the importance of educating students and training staff regarding mental health and suicide to reduce the stigma that is associated with both and to enable students and staff to recognize warning signs of suicidal behavior and where to turn for help. Opening lines of communication between school, home and the community about mental health and suicide were also found to be important protective factors. The research question continues to ask what schools can do to reduce the number of students who die by suicide as a point of comparison with what the literature recommends.
Conceptual Framework

This study utilized the Developmental Assets framework (Search Institute, 2011) developed by Search Institute. This framework is an assets-building approach that describes what children need to succeed. The developmental assets are important in my research study as the concepts relate directly to the topic of reducing suicidal risk. The concepts of the developmental assets promote positive youth development and are similar to the protective factors I found in my literature review. This is a good choice as I am coming from a perspective of prevention, reducing at-risk behaviors, and increasing protective factors.

Search Institute was developed in 1990 and its research is the most widely used approach to positive youth development in the United States. The mission of Search Institute is to provide leadership, knowledge, and resources to promote healthy children, youth, and communities (Search Institute, 2011). The institute is devoted to conducting extensive research that is founded in youth development, prevention, and resiliency. Search Institute conducts research about what children need to grow into healthy adults. They collaborate with other agencies and systems to develop the healthy maturity and development of children and adolescents and provide resources and tools to community leaders, schools, parents, policy makers and other youth workers to “create a world where all young people are valued and thrive” (Search Institute, 2011).

Search Institute developed the 40 Developmental Assets based on the findings of surveying approximately three million 6th through 12th grade students throughout the United States. They have utilized the *Search Institute Profiles of Student Life: Attitudes and Behaviors* since 1989. The Search Institute’s scientific research showed that healthy
adolescent development comes from prevention, resilience, protective factors, and encouragement, and youth development. Their holistic approach connects factors of social skills, peer influence, development of values, family dynamics, school effectiveness and supportive adults in the community to healthy childhood development and to the development of healthy adults.

The developmental assets are the “developmental nutrients” that are identified in a framework of internal and external assets (Search Institute, 2011). They are 40 personal qualities, relationships, and experiences that influence adolescent behavior by “protecting young people from many different risky behaviors, and promoting positive attitudes and actions” (Search Institute, 2011). Their studies show the more assets a child or adolescent has, the more likely they will be to do well and less likely to engage in at-risk behaviors. They assets include the external assets of support, empowerment, boundaries and expectations, along with constructive use of time. The internal assets cover commitment to learning, positive values, social competencies, and positive identity (Search Institute, 2011). The protective factors of the 40 Developmental Assets are congruent with protective factors found by Waldvogel, Rueter & Oberg (2008) in the literature reviewed. Protective factors of the 40 Developmental assets such as supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, and sense of purpose that are important in suicide prevention are similar to the life skills emphasized by Waldvogel, Rueter & Oberg (2008) which stressed involving children’s parents and who also found that skill-based programs should be implemented early in children’s development. Waldvogel, et al (2008) emphasized life skills enhancement which included the importance of
School-Based Adolescent Suicide Reduction

increasing problem-solving, coping, communication, and stress management skills, self-efficacy, self-esteem and healthy behaviors that increase resiliency in students.

The Developmental Assets framework has guided the creation of this study’s research questions for both the survey and the interviews. Research from Search Institute has inspired my continued research on the topic of adolescent suicide prevention. These protective factors or developmental assets may well offer a valuable perspective that can be applied not only to strengthening the developmental assets of children and to creating healthy adolescents broadly, but as a way of thinking about reducing adolescent suicidality, and reducing the number of adolescents who die by suicide.

I have written this as a school social worker who works at the primary level with kindergarten through second grade students. Through my lens as a social worker, I appreciate the strengths-based perspective the developmental asset approach encompasses. I have relevant experience working with students at both the elementary and middle school level who have experienced suicidal ideations and suicidal attempts. This has led me to ask what I can do better and differently to incorporate preventative programming, to increase and enhance protective factors, and reduce risk factors of the children I work with. This professional perspective has lead to my desire to obtain as much information regarding adolescent suicide prevention as I possibly can from other school social workers and mental health professionals. It was my hope to find information that is pertinent to developing a strong and effective suicide prevention program in my school district and lead to the reduction of adolescent suicide.

This study was focused on the perspective of reducing adolescent suicide through prevention programming, reduction of at-risk behaviors, and increasing protective factors
School-Based Adolescent Suicide Reduction

in children and adolescents. The asset-building factors of the 40 Developmental Assets for children and adolescents finds increasing protective factors of supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, and sense of purpose important in adolescent suicide prevention (Search Institute, 2011). These findings are congruent with the literature review findings from Waldvogel, Rueter & Oberg (2008) who found that skill-based programs should be implemented early in children’s development stressed involving children’s parents. Waldvogel, et al (2008) emphasized life skills enhancement which included the importance of increasing problem-solving, coping, communication, and stress management skills, self-efficacy, self-esteem and healthy behaviors that increase resiliency in students. The 40 Developmental Assets and my literature review both focus on building resiliency, hope, and promoting intrinsic strength of children and adolescents.
School-Based Adolescent Suicide Reduction

Methodology

Research Design

A mixed method was utilized including a quantitative survey and qualitative interviews.

Quantitative Design

Sample and Data Collection

Utilizing a convenience sample, a quantitative survey was used to survey approximately 181 school social workers from the Minnesota School Social Work Association (MSSWA). This was the total population of this professional group’s membership based upon the registered members as of 10/27/11 and sampled school social workers throughout the state of Minnesota. Access to the MSSWA’s email distribution list was obtained with permission from the association’s president as this researcher is a member of this professional organization. The researcher obtained formal approval from the organizations president and this study underwent Institutional Review Board review and approval first. The survey was emailed to the participants along with an introductory letter which served as a consent form.

Measure/Instrument

The instrument consisted of 32 questions related to school-based adolescent suicide reduction (See Appendix A for survey). The survey included 10 five-point likert scale questions, four yes/no questions, and eight semi-structured, open-ended questions, which were answered according to each participating school social worker’s beliefs regarding school-based adolescent suicide reduction. The survey also included 11 demographic questions including age, gender, role, license, level of education, length of experience, urban or rural setting, and school level (primary, middle, or secondary) grades served,
number of social workers on staff and the number of students served by the school social worker. A variety of variables including prevention strategies, risk factors, and protective factors of adolescent suicide were included. I created the instrument based upon information that came from my literature review and assets-building approach of Search Institute (see Appendix B for survey questions).

The overarching research question was: What can schools do to reduce the number of adolescent students who die by suicide? Survey respondents were asked about their perceptions, opinions, and impressions in relation to the following sub-questions: 1. What has been your impression of the effectiveness of existing efforts aimed at suicide reduction either at your school or at schools with which you are familiar? 2. What do you believe schools can do to reduce the number of students who die by suicide? 3. What do you do or what does your school specifically do to decrease risk factors of suicidality, if anything such as substance use, disconnectedness, poor academics, or disciplinary problems? (These might be implicit such as reducing the stigma of mental health issues and suicide or explicit such as anti-bullying efforts.) 4. What do you do or what does your school specifically do to increase protective factors that protect students from suicidality, if anything such as student connectedness, student coping and problem solving skills? (Again, these might be implicit such as a warm environment or explicit such as prevention program.) 5. What do you think strengthens kids and builds resiliency in adolescents? 6. What ways do you build or foster developmental assets; do you target them? (i.e. The 40 Developmental Assets developed by Search Institute include supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, and sense of purpose.) 7. If you
had all the time and money possibly needed, what school-based efforts would you like to see incorporated to reduce the number of students who die by suicide? 8. Is there anything you would like to include that I did not ask?

**Data Analysis**

The purpose of this study was to examine school social workers’ beliefs and efforts in relation to school-based adolescent suicide reduction. The survey compares a variety of variables, using primarily descriptive analysis, to study what school social workers currently do to reduce adolescent suicide risk and what they believe is left to be done for school-based adolescent suicide reduction. The results from this survey provided information regarding school social workers’ beliefs and efforts regarding school-based adolescent suicide reduction. These factors may also form a basis for future school efforts in the reduction of adolescent suicide.

**Protection of Human Participants**

Human participants were protected by the review of this project by the University of St. Thomas’ Institutional Review Board. Participation in this study was voluntary in nature and this was stressed in the introductory letter of the online survey. Participants were informed of any potential risks of participating in this study. Survey respondents were anonymous (not known to the researcher). The participants’ survey answers were password protected on the Qualtrics Survey Software. The respondents did not list their name or other particularly identifying information in any of the answers to the survey and the study was not able to link respondent’s answers back to them individually.
School-Based Adolescent Suicide Reduction

**Strengths and Limitations**

The strengths of this survey are that it samples and collects data from a wide range of school settings all across Minnesota. It samples school social workers from both rural and urban areas. The survey samples an entire professional organization of school social workers. The interview sample also includes an additional school professional who works with adolescent suicidality as a school counselor. Limitations of this study are that it only collects data from one state. The sample is biased towards gender as a greater amount of school social workers are female. A larger sample would be beneficial for a more random sample of school social workers or of other professionals throughout the United States.

**Qualitative Design**

**Participants**

This researcher interviewed two school professionals who work with adolescent students in a school setting in order to potentially contextualize written, anonymous survey responses, which only allow for shorter responses. They were selected as a purposive sample, based on their experience of working with children and adolescents. The interviews took place in person and by telephone depending upon the location of the interviewee. All procedures for this study were approved by the University of St. Thomas Institutional Review Board. Each interviewee’s identity was kept confidential. This was done by not disclosing the interviewees name in the audio taped interview or transcription of the interview. The transcriptionist signed a confidentiality agreement stating they would keep all research information confidential by not discussing or sharing the information in any form or format with anyone other than this researcher who is the
primary investigator of this study. The consent form signed by the interviewees was kept in the researcher’s office in a locked storage box. The respondents were provided with a consent form to inform them of the nature of the study, the questions asked along with a rationale for them, and of their rights in relation to the study. Consent was also reviewed with each respondent before each interview in person or by telephone. The researcher utilized a consent form template from the University of St. Thomas Blackboard. An unsigned copy is included in the Appendices (see Appendix C) of the final paper.

**Data Collection**

A 45-60 minute interview of each individual respondent was conducted by the researcher. The questions were developed based on the researcher’s interest in adolescent suicide reduction. The interviewees were asked 10 demographic questions including age, gender, role, license, level of education, length of experience, urban or rural setting, and school level (primary, middle, or secondary) grades served, number of social worker on staff, and the number of students they serve. They were asked 17 semi-structured, open-ended questions, and 10 five-point likert scale questions, corresponding with the survey questions mailed to other respondents. The interviewees answered the questions according to their beliefs and experiences regarding school based adolescent suicide reduction (see Appendix D). Feedback regarding the questions was obtained from Dr. David Roseborough and the other committee members. The questions were then amended, based on that feedback and as a form of peer review. The interviews were audio recorded and transcribed. The data gathering and organizing tools included a note pad, tape recorder, field notes, and a computer.
School-Based Adolescent Suicide Reduction

Setting

The researcher allowed the respondents to choose a location where they will be most comfortable such as their office, coffee shop, or library. This was determined in advance per telephone conversation.

Data Analysis

The data obtained from the interview regarding what school-based efforts can be utilized to reduce the number of students who die by suicide was examined and interpreted through content analysis. Content analysis identified themes or patterns in the interviews through a systematic and detailed examination and assessment of the information obtained (Berg, 2009). The researcher looked for manifest or overt themes in the content that served as sensitizing concepts (those found in my review of the literature). These include variables such as education, screening, prevention programming, suicide policies, risk factors, protective factors, and developmental assets.

Strengths and Limitations

The strengths of the interviews include the richness and great personal depth in the stories as the interviewees have the opportunity to tell their beliefs, opinions, and impressions of school-based adolescent suicide reduction. Interviewing only two people can be seen as both a limitation and strength. The two interviewees are key stakeholders with experience in adolescent suicide which adds a particular nuance; however the sample is not representative of all professionals who work with adolescent suicide. A limitation may be that the interviewees were self-selected to take part in this study.
Findings

A mixed method was utilized including quantitative surveys and qualitative interviews to examine what schools can do to reduce the number of students who die by suicide from the perspective of school social workers. Participants were asked to comment on their perceptions regarding suicide risk reduction and three dominant themes revealed in both the surveys and interviews were 1. suicide prevention strategies 2. reduction of risk factors and 3. enhancement of protective factors.

Quantitative Survey

This study was conducted by sending a survey (see Appendix B) to approximately 181 school social workers. The social workers were chosen as a convenience sample through the Minnesota School of Social Work Association (MSSWA). The survey software, Qualtrics was used and a sample of (N=27) surveys were completed. Of the 27 participants, 26 were female and 1 was male. Respondents’ level of education included MSW’s (n=20) and BSW’s (n=7). The majority of respondents (63%, n=17) had 11 or more years of experience as a school social worker, the others (37%, n=10) had 0-10 years of experience. Of the school social workers who responded, 37% (n=10) work at the primary level, 45% (n=12) at the middle or secondary level, and 19% (n=5) reported “other” as they worked at both middle and secondary schools, k-6, k-12, or 7-12 levels. The respondents reported 41 % (n=11) of their schools implement mental health/suicide screening for their students and 59% (n=16) reported they did not. Respondents reported 56% (n=15) of their schools have programming in place for mental health awareness for their students, 74% (n=20) of the respondents schools have anti-bullying programming in place, however only 26% (n=7) of the respondents reported having suicide prevention
curriculum in place in their schools. Of the (n=7) respondents specifying the name of the suicide prevention in place in their school, (n=4) reported using the *Signs of Suicide* (*SOS*) in their schools.

The questionnaire asked eight open ended questions. Content analysis was utilized identifying three major themes. The themes revealed in the interview fell into the broad categories of 1. suicide prevention strategies 2. reduction of risk factors and 3. enhancement of protective factors.

1. Suicide Prevention strategies: Respondents were asked to describe what they believe schools can do to reduce the number of students who die suicide. Dominant themes emerged that revealed education, mental health services, student involvement, connectedness, and relationships. Respondents tended to see prevention as largely a community responsibility in which the school played an important role and they reported both formal and informal strategies. Formal strategies by the school social workers included educating parents about how to respond to warning signs of suicide, educating teachers about risk factors of suicide and what to do when faced with warning signs of suicide. One respondent stressed that staff need to take all threats of suicide seriously. Respondents emphasized prevention strategies should include educating students about mental health and suicide, warning signs of suicide, coping skills, respect, character education, empathy, and healthy lifestyle. One respondent stated, *as much mental health education as possible [is important] and to stop the whole ‘bullied to death’ phenomenon. Bullying does not cause suicide. Mental health issues cause suicide.* By this, the respondent seems to be saying that bullying is a moderating or mediating variable of adolescent suicidality. Additionally, they also reported utilizing social skills
School-Based Adolescent Suicide Reduction

groups and education about how student behaviors (e.g. bullying/harassment) affects others. One respondent stressed educating adolescents about transience of feelings and stated, *let them know there is always help and that their thoughts will not always leave them feeling this badly.*

Other respondents discussed providing comprehensive health program at all levels, adequately staffing mental health and the number of school social workers to allow for prevention along with manageable school social worker caseloads and employing clinical social workers. They also included bullying prevention programming, (mental health and suicide) screening, strong mental health programs, involving parents when threats of suicide or symptoms of depression are presented, providing referrals to outside resources, and transition services for graduating students.

Informal strategies of school-based adolescent suicide reduction included addressing mental health needs of all students, creating an environment of respect, developing staff connectedness and relationships with students and talking about mental health and suicide with all students to reduce the stigma. One respondent stated it is important to, *talk to students about their behaviors and how they impact others…things like bullying, harassment, etc. as well as actions like attempting and/or successfully completing a suicide. Knowledge can be a great preventer when used correctly. Also schools are educators not just of students, but of parents and communities, using that power and those connections to educate, all is important.*

2. Reduction of Risk Factors: Participants were asked what they or their school specifically do to decrease risk factors of suicidality. Dominant themes regarding reduction of risk factors of suicidality centered on reducing the stigma of mental health,
School-Based Adolescent Suicide Reduction

forming student connections, providing mental health services and programming and education. Formal and informal strategies included the need to increase staff connectedness and relationships with students. Regarding relationships, one school social worker reported,

*students complete a relationship density survey where they indicate with which adults they have a connection at school. Those students who indicate zero or a low number of connections with adults are then adopted and staff members purposely try to form a connection with those students.*

Another respondent also discussed the importance of connectedness and stated, *we have an adopt a student program where our staff members adopt those students who don’t have any connectedness at school, who do poorly in academics, or who are frequently absent.* Informally, a respondent stressed the need to increase staff connectedness and relationships with students and reported, *I try to be available and visible at the beginning and end of every day. I greet the students by name and ask them questions about their life happenings.*

School social workers spoke to the importance of mental health services at school and of reducing the stigma of mental health and of students getting help. Respondents emphasized individual and group counseling through school social workers, and providing interventions and support groups for students who are depressed or exhibiting other risk factors. They also stressed therapy and mental health services on site provided by outside agencies. Additionally, respondents saw chemical health support with a chemical health coordinator and support group to be beneficial along with partnering with their school resource officer.
School-Based Adolescent Suicide Reduction

Student education was found to be essential to many respondents who felt students needed education and understanding about mental health issues and when to get help, how to find a trusted adult, how to be assertive and use positive thinking. Student retreats such as the Courage and the Respect Retreat by Youth Frontiers was illustrated as useful for student education. Health class with mental health and anti-bullying units, in addition to suicide prevention programs was also suggested. Classroom guidance was emphasized to teach character building, assets, positive self-image and problem solving skills. The program, Quest, focuses on teaching social and friendship skills. Additionally, student involvement in athletic activities, student run clubs, student council, Girl Scouts, and celebrations honoring the cultural heritage of students represented at school organized and planned by the students was found to be significant.

Anti-bullying and harassment policies and efforts were also discussed. A respondent stated, we celebrate No Name-Calling Week. Others have a procedure for reporting and responding to bullying. One respondent emphasized, bringing mental health awareness to the forefront is essential. Anti-bullying efforts are important, but more important is the understanding that those who choose to kill themselves are dealing with strong mental health issues.

Participating school social workers spoke to the importance of teacher training to educate staff regarding early warning signs of mental health disorders and also domestic violence education. They additionally discussed collaborating with community providers and referring to outside mental health agencies. Other respondents emphasized school teams that address students with poor academic success, attendance issues and disciplinary problems, and students struggling socially and emotionally. Supportive
programming discussed was identified and included 504 plans (a plan which includes accommodations and modifications necessary to keep students with certain disabilities available for learning) for students with mental health needs, Responsive Classroom, Positive Behavior Interventions and Systems (PBIS), school-based mental health services, class presentations, continuous collaboration with district schools, counseling services, crisis committee, Response to Intervention (Rti), and student assistance teams with one respondent stating, *we have teams that address students with poor academics and disciplinary problems.* A respondent spoke to being a relationship-based school and having *the focus more on processing problem behaviors than providing consequences.*

Survey respondent spoke to dominant themes of reducing stigma associated with mental health, education and awareness of mental health, along with education regarding chemical use, psychosocial education and skill development, and anti-bullying programs and efforts.

3. **Enhancement of protective factors:** School social workers were also asked what they or their school specifically do to increase protective factors that protect students from suicidality. Participants in this sample spoke not only to the importance of protective factors, but to the enhancement of protective factors beginning early. For instance, one respondent stated, 

> the protective factors begin in elementary. All students need to have a positive peer group. All students need to be recognized for their own unique accomplishments. This begins with the classroom community and building culture of acceptance and tolerance of differences.
School-Based Adolescent Suicide Reduction

The community’s role came through also, as it did in the two previous themes as increased connection and connectedness with students was emphasized. Examples included quotes such as, *teachers spend time in hallways and after school with students trying to get to know them and make them feel valued. We aren’t perfect but we make great efforts to let kids know we care.* Another stated, *we do a school connectedness program called adopt a student.* We have *students complete a relationship density survey where they indicate with which adults they have a connection at school. Those students who indicate zero or a low number of connections with adults are then adopted and staff members purposely try to form a connection with those students.* These teachers have a strong and central role forming connection with their students. An example included “family” meeting on Fridays involving staff and students in one of the respondent’s schools. Even in the homeroom, their role is creating community with warm, accepting environment and connectedness with adults.

Staff intervention was stressed through teacher awareness and referral of student concerns to student services personnel. Support staff included school social work services which included individual counseling, a full-time nurse, social worker, and school counselor that serve 130 students, on-site therapy, school-based health clinic, and truancy interventions. Other protective factors discussed by the school social workers included student rewards for academics, attendance, helping others, yoga class, and a school-based health clinic.

As in the two previous themes, student education was stressed through a health class unit on depression and suicide, in addition to health information, advisory groups and class discussion regarding team building. Prevention was seen as needed in individual
School-Based Adolescent Suicide Reduction

and group formats with both individual and group work. Skills for coping, assertiveness, friendship, problem solving, and social skills were revealed as essential in the enhancement of protective factors. Respondents reported social skills instruction through the Quest Program, Auto B. Good, Peacemaker Program, Terrific Kid Program, Second Step. Student involvement in structured, positive activities was stressed as one respondent found it important to try to get as many kids involved in things as possible. Teachers have raised money and paid for student activity fees, clothing, etc. so that no one is barred from taking part in something they want to do.” Student groups such as Students Against Destructive Decisions (SADD), and Gay Straight Alliance (GSA) were suggested for both student involvement and student support.

Qualitative Interviews

In addition to the surveying school social workers throughout the state of Minnesota, further context was found through the interview responses of two school professionals. The study interviewed two master level school professionals, one school social worker and one school counselor. The school social worker has worked in the field for 20 years and currently serves students in kindergarten through 12th grade. The school counselor has worked in the field for 13 years and works with students in 9th through 12th grade. The participants’ answers to 18 open-ended questions revealed three major themes in the interviews including the importance of 1. prevention strategies 2. knowledge of and reduction of risk factors 3. knowledge of and enhancement of protective factors with the goal of examining what schools can do to reduce the number of students who die by suicide.
1. Suicide prevention strategies: The interview participants were asked to describe the efforts their school uses formally or informally to help reduce adolescent suicidality, what school-based efforts used in their school do they believe are effective, and does their school incorporate specific suicide prevention programming. The first dominant theme identified in the interviews was related to prevention strategies. The participants both expressed belief in the importance of a comprehensive plan and identified three key stakeholders, students, staff, and parents, to educate about mental health and suicide. The school social worker stressed,

all the districts have a very clear comprehensive plan [regarding] this is what we’re going to teach kids in preschool and then that build on for kindergarten and that builds on for first grade and so on. If we had a similar kind of integrated plan [for mental health] I think we’d build a lot happier, healthier, productive students…when we attend to their whole needs.

Additionally both participants emphasized the importance of educating students about mental health. The school social worker felt strongly that educating students about mental health should start early and continue often, she stated we want to start young…we start teaching kids to read young, why can’t we start teaching them about coping young? She also stated schools should,

start early and continue often. Address coping skills, problem solving ability, transience to feelings and sense of purpose. Treat mental health concerns early and teach students to pay as much attention to their mental health needs as they do to physical needs. We require student athletes to get an annual physical and many parents take their children to the doctor annually for physicals even if the child is not in sports. Our goal would be that parents screen their children for emotional concerns just as we screen for physical concerns.

The school social worker also stressed the importance of teaching students to pay attention to their mental health as they do their physical health and stressed first, we need to talk more about mental health, we don’t teach our students enough about mental
School-Based Adolescent Suicide Reduction

health, students should begin to talk about mental health as being a structured part of daily self-care [just like] eating well, exercising, drinking plenty of water, etc.

Both the school social worker and school counselor discussed the need to have mental health discussion implemented in health classes. The school counselor felt peer education involving students educating their peers through various groups was beneficial as a strategy for school-based adolescent suicide reduction and stated, 

the biggest thing that comes to my mind is just education, informing the students and a lot of that we try to do by their peers through different groups that students belong to because we can say things till we’re blue in the face, but when they hear it from their peer sometimes has a lot more meaning.

She discussed education through lyceums (presentations), speakers brought into the school, in addition to the curriculum in health, her school utilized English class as some of the books the students read and projects they do in the classroom can be related to mental health and suicide.

In addition to educating students, the school social worker stressed the significance of supporting and educating staff through gatekeeper training or mental health professional development which included paying for substitute teachers so teaching staff could attend during the school day was significant. Her school district presented the More Than Sad video curriculum presentation to staff which included bus drivers and cooks to teach them how to recognize when a student may need to be referred for additional mental health services. She stressed the importance of the bus drivers and the cooks taking part in this presentation as they see students in a more informal setting where they are more likely to act like their normal selves versus when a student is in their classroom, they then are more apt to put on their classroom face. The More Than Sad teaches what kids may look like when they have a mental health issue such as depression. She stated,
School-Based Adolescent Suicide Reduction

*one of the hallmarks of depression for adolescents is irritability. Most people don’t think of irritability as being a sign of depression, they think of it as just being a kid who’s being a pain and so we provided the More Than Sad video to the staff so they can learn enough to be able know when they should let somebody else know they’re concerned about a kid…it’s not about turning staff into junior social workers, it’s about introducing that gatekeeper philosophy that everybody is a gatekeeper for the students that we serve.*

Both participants stressed the importance of educating parents through presentations by local experts on mental health issues and easy access to mental health services through a local children’s mental health center was important.

Like those in the surveys, the school social worker discussed suicide prevention programming such as the *Signs of Suicide*. In addition to the program, it includes a personal assessment given to seniors as a tool to assess themselves after graduation. The school counselor stated her school does not utilize a specific suicide prevention program, however she acknowledged, *we try to base anything we’re going to implement on any topic passed on the current needs.* She would like an academic program required of all students not passing a class as that is such a huge red flag and stated, *there’s no reason they should be failing, we have voluntary programs after school right now.*

The school counselor stressed incorporating mental health assessment and discussed an informal *Feelings Checklist* she utilized when meeting with students who were closed and not and not very open to discussing their feelings. Both the school social worker and counselor stressed the importance of mental health and suicide screening through *TeenScreen*, a program that voluntarily screens for mental health concerns. Additionally, the school social worker described school based mental health services in most buildings in her district. She spoke of a *Lifeline* phone number the students program into their cell phones during advisory time as part of the curriculum. The school counselor stated her
School-Based Adolescent Suicide Reduction

school utilizes outside agencies to offer school based counseling for grief, emotional and behavioral issues, along with depression and anxiety.

Both interview participants stressed the importance of psychosocial education. The school social worker strongly believes in strengthening developmental assets, increasing resiliency, instilling a sense of purpose, teaching the transience of feelings, teaching coping and problem solving skills, she stated,

*I think we need to talk more about problem-solving and how to develop resiliency. Suicide is an impulsive act and one that seems to happen when people think they don’t have any way out. We need to begin talking to students at an early age about how to address problems, including difficult ones.*

The school social worker additionally affirmed,

*we also need to talk to students about how feelings are transient. We can feel horrible in the moment, but not as bad later. Sometimes it’s a matter of minutes until we feel better. I have to say that suicide happens in those moments when people feel so horrible they see no way out. We need to front-load students to understand that there is almost always a way out.*

The school counselor emphasized the importance of self-esteem stating, *I would like to see a big focus on building self-esteem, I think that’s the key.*

The school social worker described a program *Got Bounce* a student leadership group of peers used to help promote the concept of resiliency and problem solving, stating the name came from *like when you are resilient, you bounce.* The school counselor affirmed the importance of building students’ self-esteem. Additionally, the school counselor stressed the importance of developing and having a relationship and rapport with the students, she stated,

*if they have a relationship with us, it’s not their parents, someone that’s an adult resource outside the parent then hopefully when thing get to a point that it’s uncomfortable, that it’s frightening for them, that they’ll come to us because of the relationship.*
School-Based Adolescent Suicide Reduction

Education through lyceums, speakers, curriculum in health and English with some of the books they read and projects they do in the classroom were also seen as a prevention strategies. The school counselor feels a school policy to have every student participate in an extra-curricular activity would help the kids feel more of a part of the school, spending positive time with their peers, for both the social and physical benefits. She stated, *we have some statistics…of the correlation between extra-curricular, how they’re doing academically, and how they’re fitting in socially and the higher their involvement…they’re just happier about their friendships and they do better in all areas of life.* She would like to see a school sponsored activity mandatory for every student, but cannot do currently do that due to fees, time and transportation issues.

The school social worker would like to develop a comprehensive K-12th grade plan, *to strengthen the developmental assets and increase resiliency, this wouldn’t even take much money, it just takes time and commitment.*

2. **Knowledge of and reduction of risk factors:** Participants were asked what they thought are risk factors of adolescent suicidality and what they or their school specifically do to decrease the risk factors of suicidality. This second major theme revealed identification of risk factors of adolescent suicidality. The participants have found through their professional experience that the presence of mental health issues, especially depression or anxiety, are factors of adolescent suicidality. The school social worker suggested the presence of substance abuse issues, especially alcohol use and relationship troubles, with a girlfriend or boyfriend were risk factors. She discussed the sense of being overwhelmed and feeling they have insurmountable problems such as legal trouble or learning they are not graduating. She explained the feeling too much pressure to just
perform, especially feeling the need to be perfect and the feelings of hopelessness. She identified students’ personal history of suicide attempts and family history of attempted or completed suicide were also risk factors. The school social worker discovered that in the literature is...just knowing...well somebody who died by suicide is a huge risk factor.

The school counselor stressed the lack of parental involvement, poor grades and poor attendance as risk factors of adolescent suicide. She emphasized the decrease in their self-esteem at this age is a risk factor and stated, I think that’s the biggest factor....is they’re just trying to cope with just not feeling confident, not feeling strong, that low self-esteem is a huge issue that we try to overcome constantly.

To help reduce risk factors of adolescent suicide, the school social worker stated her school district developed a partnership with an agency that conducts a therapeutic mental health classroom for students who have been suspended or in special education and have reached their limit on days of suspension and who need more of a structured educational setting. She explained they address disconnectedness and every building in her district has guidance counselors who have curriculum for anti-bullying and some have anti-bullying initiatives. Although the school social worker felt her district had some initiatives in place to help with the reduction of risk factors of adolescent suicide, she felt this is where her district was lacking and they do not have a good broad spectrum strategic effort.

The school counselor discussed student-led groups that promote awareness several times throughout the year and coordinate different presentations with outside mental health agencies to discuss depression, anxiety and suicide awareness. She utilized guidance presentations proactively to promote awareness of stress, depression, also
encouraging students to reach out for help for themselves as well as for their friends.

After the presentations, they

*usually see an increase in our visitors after we do presentations like that, not just for themselves, but encouraging them to reach out to others when they’re concerned and being the better friend and responsible to tell an adult and not just try to take care of it on their own.*

She stated her school also has a chemical assessment team that is a multi-disciplinary team which assesses the chemical use and possible coinciding depression versus just substance abuse. They further promote anti-bullying through peer groups and utilize an alert system where students, staff, and community members can anonymously report student safety concerns.

### 3. Knowledge of and enhancement of protective factors

Knowledge of and enhancement of protective factors: The interview participants were also asked what they thought were protective factors that protect students from suicidality and what they or their school specifically do to increase protective factors. This third prevailing theme revealed in both of the interviews was the identification of protective factors of adolescent suicidality. Both of the respondents emphasized connection and relationship with positive adults who care about their future. The school counselor also sees strong involvement in school, resiliency, regular counseling, and medication use as needed as protective factors of adolescent suicidality. She also discussed the significance of her building a relationship with the student along with teachers too as,

> [counselors] can’t reach them [students] all...the one that get the most of our time are the ones that seek us out and they’re not always the ones that are hurting the worst and so if they can make that contact with some adult in the building, whoever it its, and trust them enough to then have them find us and then we can start working with them.” We like to have the relationship with the student before there is concern, because then they’re much more willing to come to us then.
The school social worker stressed the importance of positive parent engagement, problem solving ability, absence of drug and alcohol use, and treatment of mental health concerns. She stated,

*I just recently heard something from the national media that said one out of every four people will have a mental health concern at some point in their life and so frankly we need to think about that being the new normal and so a protective factor the new normal will be that if you have a mental health concern, then you get the appropriate treatment for it.*

The school social worker also emphasized support of developmental assets. She stated they talk about developmental assets and have presented it to the school board and principals. Her district doesn’t specifically target developmental assets as protective factors, but they do implicitly and informally as they utilize the assets as a guide during development, implementation and evaluation of activities and they specifically identify which ones they are targeting during each of these phases. Guidance counselors informally incorporate them into their work and it is part of their typical conversations with students. The school board has a very strong interest in using them as a framework and part of their strategic plan for what they are going to do for broad based mental health services and suicidality would be incorporated into the framework. Their school also conducted a survey of the developmental assets of the 9th-12th grade student in a recent spring and presented data to their staff and school board.

The interviews with the participants found the school social worker didn’t feel they did a good job at directly increasing protective factors of adolescent suicidality. She stated they do very little specifically, and stated, *I don’t feel like we do a very good job of that [increasing protective factors] at all, I think we do very little specifically, I think some things might be accidental through supporting a developmental asset.* Although
she has presented the developmental assets to the school board and principals, the district is not immersed in it yet due in part to budget cuts.

The school counselor pointed out that building relationships with the students, exposing themselves to the students so the students see and hear them, doing announcements (over the school intercom), and phone call messages to families are all important in increasing protective factors. She stated *we like to have the relationship with the student before there is a concern because then they’re much more willing to come to us then.* She stated her high school utilized *TeenScreen* to screen for mental health issues and suicidality,

The school counselor works with students individually regarding depression and anxiety and presents classroom guidance lessons related to depression and anxiety in her work as a school counselor. She talks a lot of student about conflict resolution and purpose, asking, *what is your purpose here and what is the purpose of events that happen to you? I try to challenge them to look at it in a different view than what they narrowly focus in on.* She emphasized the importance of school engagement and she has high expectations stating, *I’m a big believer in high expectations with teenagers because I see it less and less with the parents.*

Both participants reported the importance of strengthening resiliency as a protective factor of adolescent suicidality. The school social worker stated adolescents need connectedness to school and school success. She stressed the importance of having positive and engaged parents, understanding how to address life’s problems, and having their mental health needs addressed early and often. She also revealed the importance of having a purpose greater than themselves, e.g.
having them begin to volunteer or to think about something other than their own problems...not disregarding their life difficulties that we always have, or that we all have, but helping them understand that old adage that somebody else’s got it worse.

The school counselor saw the inherent resiliency that a student has, and the need to foster, nurture and develop that inherent characteristic. She stated strong involvement in school is important, you know just as if you look at it like building a house, if you don’t have a strong foundation you don’t have much to build on top of that and I think two of the biggest components there is with that foundation is school involvement and parent involvement. She suggested friends affect resiliency in adolescents depending on who their friends are...are they friends that lift them up or push them down? She sees students who aren’t so into Twitter or Facebook cope better, stating, the ones... so into the Facebook, Twitter, they have to follow that religiously and they just become absorbed in that, they can’t focus on anything but that negative stuff they’re hearing, seeing, reading and believing, and so if they can stay away from that I think they’re much more resilient student. She has found that students who rely less on technology have better coping and adjustment.

Barriers to reducing adolescent suicide were also revealed by both participants. The school social worker stated getting people who are not mental health professionals to understand the importance of addressing mental health and suicide during the school day when schools are being challenged to increase academic achievement is a huge barrier. She also sees another barrier is having the time in the school day to address mental health concerns and stated, it really takes a forward thinking superintendent to recognize that we need to focus on the needs of the whole child and not just the academic child. The school counselor emphasized the importance of eliminating barriers to mental health
services and care such as stigma, finances, time, lack of parental effort to mental health services. She stated,

if we could eliminate those barriers to make sure that they’re all getting [mental health services] because now versus 13 years ago…I’m not just seeing an increase in depression, anxiety, and suicidal thoughts, it’s not just the volume, but the level is so much more significant, so much worse than it was back then and I think some of that….is tied to the socio-economic status…. [and language barriers], people from other cultures and not speaking a lot of English and things like that so you have those barriers that you’re trying to work with too…or it may not be their values and beliefs to accept help like that.

Effectiveness of existing efforts was addressed by both participants. The school social worker felt

suicide efforts seem to work best when there has been a recent suicide in the school district and efforts want when there is distance from the time of the tragedy. Efforts seem to rarely develop as a part of a strategic effort which diminishes their effectiveness and the likelihood of deep integration.

Additionally, the school counselor stated, you don’t always hear that feedback from kids on how effective things are or how much it resonates in their head….but I just try to think if it helps one person it’s worth it…I would say I’d have to believe they’re effective or I couldn’t do what I do.

Like the school social work survey respondents, the school social worker and school counselors’ beliefs and efforts regarding school-based adolescent suicide reduction affirmed they find school-based efforts of high importance. Both the survey and interview respondents highly rated goals or interventions such as educating staff and students about mental health and suicide as essential, along with incorporating mental health and suicide screening, and suicide prevention programming and policies district-wide. They all also highly rated reducing risk factors of suicide, enhancing protective factors of suicide, developing assets, and building resiliency as important.
School-Based Adolescent Suicide Reduction

The surveys and interviews revealed three prevailing themes regarding what schools can do to reduce the number of students who die by suicide. The first theme revealed suicide prevention strategies involving a comprehensive plan, education regarding mental health, suicide, transience of feelings, anti-bullying, and psychosocial issues for students. It also emphasized staff, gatekeeper, and parent education, along with social skills, life skills, mental health programming, parent involvement, and connectedness and relationships with students. The first theme additionally stressed talking about mental health and suicide to reduce the stigma, incorporating mental health and suicide screening and assessment, mental health services in school, and adequately staffing mental health workers with manageable caseloads. The second theme revealed identification and reduction of risk factors such as the presence of mental health issues, substance abuse, relationship troubles, stress, pressure, hopelessness, personal history of suicide attempts, and family history of attempted or completed suicide. The second theme also suggested lack of parental involvement, poor grades, poor attendance, and lack of self-esteem as risk factors of adolescent suicidality. This theme emphasized reducing the stigma of mental health, forming student connections, providing mental health services, psychosocial education, skill development, student education, staff training, supportive programming and curriculum, anti-bullying policies and programs, and student involvement. The third and final theme revealed identification and enhancement of protective factors, prevention and early intervention such as connection and relationship, school involvement, resiliency, regular counseling, medication as needed, positive parent engagement, problem solving ability, absence of substance use, treatment of mental health concerns, support of developmental assets, and conflict resolution. Strengthening
School-Based Adolescent Suicide Reduction

resiliency, understanding how to address life’s problems beginning early with positive peer groups, increasing student connectedness and relationships, having students’ mental needs addressed early and often, having a purpose greater than themselves, mental health and suicide screening, staff intervention, and student education were revealed as ways of enhancing protective factors of adolescent suicide. The respondents recognize there are many preventative strategies and interventions schools can do, along with a variety ways to decrease risk factors and increase protective factors of suicide, however one respondent stated, a lot [is left to be done to help reduce adolescent suicide]...unfortunately a lot of it we’re not doing because of finances and time and it’s felt a lot more can be done.
Discussion

The purpose of this study was to examine school social workers’ beliefs and efforts in relation to school-based adolescent suicide reduction and to examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide. The survey and interview responses by the participants are congruent with the literature reviewed that supports suicide prevention strategies, reduction of risk factors, and enhancement of protective factors.

The data collected from the respondent tells the researcher that although schools cannot prevent all student deaths by suicide, there are interventions and programs that can be implemented to help reduce the number of student deaths by suicide. The researcher was pleased to see this was congruent with the literature in support of education, programming and screening, knowledge of and reduction of risk factors and knowledge of and reduction of protective factors to help reduce the number of students who die by suicide as Lieberman, Poland and Cowan (2006) explain that schools can provide prevention strategies, increase awareness of risk factors, and strengthen protective factors to reduce suicide ideation and the number of students who die by suicide.

1. Suicide prevention strategies: Respondents emphasized prevention strategies should include educating students about mental health and suicide, warning signs of suicide, coping skills, respect, character education, empathy, and healthy lifestyle. The respondents were knowledgeable about suicide prevention strategies and tended to see prevention largely as a community responsibility in which the school played an important role. They felt prevention strategies were valuable as did the literature by Lieberman, Poland and Cowan (2006) who emphasized the responsibility of the schools to implement
School-Based Adolescent Suicide Reduction

suicide prevention programs to reach students who have mental health issues such as depression or anxiety along with students who are risk of suicidal behavior. The American Academy of Child and Adolescent Psychiatry (2010) also emphasized school-based programs promoting mental health and comprehensive interventions have been shown to decrease suicides and suicide attempts over time.

Respondents did report mental health and suicide screening that voluntarily screens students for mental health concerns was essential and was consistent with the literature by Waldvogel, Rueter & Oberg (2008), as the authors discussed adolescents who are at risk of suicidal behaviors can benefit from screening. The American Academy of Child & Adolescent Psychiatry (2010) also reported that mental health screening is a beneficial strategy for suicide prevention by screening for depression, other mental illness, suicidal ideations, or past suicide attempts.

Respondents spoke of the significance of training gatekeepers such as bus drivers and cooks as essential since they are the people who see students outside of the classroom in more informal setting. Waldvogel, Rueter & Oberg (2008), discussed how gatekeeper training educates community members and school staff who have regular contact with adolescents. Training provides knowledge regarding suicidal risk, skills to identify suicidal behavior, establishing levels of risk and how to make referrals to care providers as needed (Waldvogel, Rueter & Oberg, 2008).

Respondents clearly identified that a comprehensive K-12 plan is needed which identifies an integrated plan for mental health and attending to the student’s whole needs, as a comprehensive plan can increase student resiliency and strengthen their developmental assets. The American Academy of Child and Adolescent Psychiatry
School-Based Adolescent Suicide Reduction

(2010) also suggested comprehensive interventions and school-based programs promoting mental health have been shown to decrease adolescent suicidality.

Respondents discussed prevention programs such as Got Bounce to increase resiliency, Signs of Suicide, a suicide prevention program, and the More than Sad program that teachers, students and staff about mental health. Gould, Klomek, and Sourander (2011) also illustrated a suicide prevention program, the Sources of Strength program, that enhances protective factors associated with adolescent suicide risk which involves peer leaders and enhances connectedness between trusted adults and adolescents.

Education for students, staff, and parents along with normalizing mental health and talking about mental health and suicide to reduce the stigma were stressed by respondents. They also discussed the significance of educating staff about the risk factors of suicide and what to do when faced with warning signs of suicide and a respondent discussed the More Than Sad video curriculum for staff and gatekeepers. Respondents also stressed educating parents about how to respond to warning signs of suicide.

Student education and skill enhancement and suicide awareness was also emphasized by respondents and was very similar to the research which showed that enhancing students’ skills may be a beneficial accompaniment to suicide awareness programs (Waldvogel, Rueter & Oberg, 2008) Additionally, life skills enhancement emphasizes increasing problem-solving, coping, communication, and stress management skills, self-efficacy, self-esteem, and healthy behaviors which increase resiliency in students and found a decrease in suicidality. Also, psychosocial education, strengthening developmental assets, increasing resiliency, and instilling a sense of purpose was affirmed by
School-Based Adolescent Suicide Reduction

participants as Waldvogel, Rueter, and Oberg (2008) did as they stress that suicide awareness should include school-based programs to educate students and staff about warning signs of suicide, increase understanding of suicidal behavior and recognition of symptoms, how to identify at-risk peers and students, where to seek help for themselves, their at-risk peers or their students, educating about community resources and reducing the stigma that is associated with mental health and suicidality through education. They also promoted life skills enhancement to increase problem-solving skills, coping, communication and stress management skills, self-efficacy, self-esteem, and healthy behavior (Waldvogel, Rueter, & Oberg, 2008).

Early intervention and education of students was emphasized by respondents about mental health and suicide, that it should begin early and continue often. Respondents also promoted education about transience of feelings, anti-bullying, and psychosocial issues/psychosocial education, along with social skills, life skills, and problems solving as prevention which was congruent with literature as Waldvogel, Rueter, & Oberg (2008) stressed skill-based programs should be implemented early in children’s development.

The respondents spoke about the importance of parent involvement and involving parents when threats of suicide or symptoms of depression are presented as did the study by Waldvogel, Rueter & Oberg (2008). These authors also affirmed involving children’s parents and implementing skill-based programs early in children’s development.

School belonging, connectedness, relationships, inclusion, and engagement were emphasized by the respondents as they felt strongly that having connection and relationships with students is important as did Waldvogel, Rueter, and Oberg (2008). These authors promote the need for adolescents to have an adult they feel connected to, a
safe person for support, assistance, and reassurance that their feelings are not abnormal and there is help for what they are experiencing.

Respondents did not discuss restriction of lethal means, the role of the media, the importance of educating the media about suicide contagion, or the role of suicide contagion as did the literature by Waldvogel, Rueter and Oberg (2008).

2. Knowledge of and reduction of risk factors: Respondents emphasized that stigma about mental health and suicide is a significant risk factor of adolescent suicidality. Talking about mental health and suicide as a risk factor and the stigma of reaching out to get help was found to be essential to reduce this risk factor of adolescent suicidality. Nell and Salvador (2011) examined risk factors of suicide and also found that seeking help is sometimes hindered by stigma that is associated with mental illness, suicide, or the shame of past suicidal attempts.

The presence of mental health issues and the student’s personal history of suicide along with a family history of attempted or completed suicide were found to be risk factors of adolescent suicidality by the respondents. Nell and Salvador (2011) found adolescents who attempted suicide often had a family history of attempting or completing suicide. They also found that unmanaged mental illness or co-occurring disorders were risk factors. Waldvogel, Rueter and Oberg (2008), stated that family history of attempted or completed suicide increased the risk for suicidal behavior because of the suicidal behavior that is modeled and learned and they also described preexisting mood disorders such as depression and anxiety as a risk factor.

Respondents discussed issues of substance use as risk factors of adolescent suicidality and discussed reducing this risk factor by educating about chemical use and utilizing a
school chemical assessment team. The Harvard Medical Family Health Guide (2008) reported that two-thirds of adolescents who had attempted suicide had both a history of substance abuse and a psychiatric disorder. Waldvogel, Rueter, and Oberg (2008) also described drug or alcohol use as a stressor in an adolescent’s life that is associated with suicide ideation as did Riesch et al. (2008).

Although the respondents didn’t directly discuss bullying as a risk factor of suicide, they did state the importance of anti-bullying programs, initiatives, and efforts for the reduction of adolescent suicidality. Bullying was found to be a risk factor for students’ suicidality as Riesch et al. (2008) and Lieberman, Poland and Cowan (2006) point out that bullying behavior or victimization was found to be linked to suicide ideation and that anti-bullying policies and programs are needed to reduce the risk factors. Gould, Klomek, and Sourander (2011) also indicated childhood and adolescent bullying and cyberbullying behavior have been associated with depression, suicidal ideation, and suicide attempts in elementary, middle and high school students. They found that both peer victimization and bullying along with existing comorbidity of psychopathology were cause for concern as they were serious risk factors for later suicidality. They advocated for adolescents to be taught skills and empowered to stop the bullying and cyberbullying situations.

Lack of education about mental health and suicide was found to be a risk factor for adolescent suicide. Educating students and staff about mental health and suicide was promoted to decrease the risk. Respondents stressed mental health education and awareness, and school-based mental health services on site to provide individual therapy, groups, and classroom guidance counseling were necessary to reduce adolescent
School-Based Adolescent Suicide Reduction

suicidality. Student education was found to be essential to many respondents who felt students needed education and understanding about mental health issues, when to get help, how to find a trusted adult. Waldvogel, Rueter & Oberg (2008) also stressed suicide awareness should include school-based programs that educate students about warning signs of suicide and also increase their understanding about suicidal behavior and recognition of symptoms. They stated education includes how to identify at-risk peers, where to seek help for themselves or at-risk peers and educating them about community resources. This study identified benefits of suicide awareness; however it does suggest that a curriculum-based prevention program combined with school wide screening would be the most beneficial.

Psychosocial stressors, intra-personal factors, and internalizing behaviors such as stress, pressure, hopelessness, lack of self-esteem, coping and ability to manage problems along with relationship troubles and school issues such as poor grade and poor attendance and feeling that problems are insurmountable were seen to be risk factors of adolescent suicidality. The need to provide psychosocial education and cognitive skill development through classroom guidance was also stressed to teach psychosocial education and skill development of assets, positive self-image, problem-solving skills, social skills, and friendship skills and character building. Waldvogel, Rueter, and Oberg (2008) pointed to stressors in the adolescents’ life that are associated with suicide ideations such as peer pressure, loss of a romantic relationship, disciplinary problems, poor academics along with cognitive thought processes such as poor self-esteem and feelings of hopelessness. SPRC & Rogers (2011) also found immediate stressors, including relationship problems
or break-ups, public humiliation or shame, and legal difficulties may be a tipping point that may push a person considering suicide over the edge or be the final straw.

Respondents found a lack of parental involvement to be a risk factor of student suicidality as did Nell and Salvador (2011), who found that many people who attempted suicide had a lack of support from and lack of connections with family which was linked as a risk factor. Respondents additionally discussed the importance of student connections and that the student’s interpersonal factors such as ability to form connections was a risk factor of adolescent suicidality. The discussed to reduce this risk factor, adults need to increase staff connectedness and relationships with students. Nell and Salvatore (2011), also found that risk factors of suicidality included being unconnected, having no support, a sense of not belonging or being a burden. Riesch et al. (2008) found adolescents who feel less connected to their school are increased risk of suicide. The literature review did not discuss supportive programming and curriculum or student involvement in clubs, groups, or sports as did some of the respondents in this study.

Respondents did not discuss suicide contagion due to association with friends who have attempted or completed suicide as did Riesch et al. 2008 and, Waldvogel, Rueter, and Oberg (2008), nor the role of the media. Respondents also did not discuss sexual orientation, access to weapons, socioeconomic or demographic factors, or physical or sexual abuse as risk factors of adolescent suicidality as did the literature that was reviewed.
3. **Enhancement of protective factors:** Connections and relationships were protective factors emphasized by the respondents and by Lieberman, Poland, and Cowan (2006). They assert that students’ connectedness to teachers and staff is important protective factors of adolescent suicidality. Trained staff was also stressed by the respondents as a protective factor of adolescent suicidality as staff is at the front line and considered gatekeepers. The respondents discussed having staff and gatekeepers trained regarding risk factors for suicide or mental illness as they can refer the student to the mental health workers at school who can assess and intervene. Along with the respondents, Joe and Bryant (2007) and Lieberman, Poland and Cowan (2006) emphasized the need for the gatekeepers or the school staff to be trained regarding warning signs of suicide, identification of at-risk students, recognition of suicidal behavior and what to do and where to turn for assistance.

Respondents promoted providing student education through character education programs or curriculums which would teach students needed skills as well as provide them with an avenue to discuss suicide prevention and mental health as a protective factor. Waldvogel, Rueter, and Oberg (208) also felt that educating students about warning signs of suicide, increasing understanding of suicidal behavior and recognition of symptoms, how to identify at-risk peers, and where to seek help for themselves or at-risk peers was needed for reduction of adolescent suicidality.

The asset-building factors of the 40 Developmental Assets for children and adolescents was found by the respondents to increase protective factors. Supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, and sense of purpose was found to be
School-Based Adolescent Suicide Reduction

important in adolescent suicide prevention (Search Institute, 2011). These findings are congruent with the literature review findings from Waldvogel, Rueter & Oberg (2008) who found that skill-based programs should be implemented early in children’s development. Waldvogel, et al (2008) emphasized life skills enhancement which included the importance of increasing problem-solving, coping, communication, and stress management skills, self-efficacy, self-esteem and healthy behaviors that increase resiliency in students. The 40 Developmental Assets and my literature review both focus on building resiliency, hope, and promoting intrinsic strength of children.

This researcher has come to believe that forming connections and relationships with students as soon as they walk through the doors at school is the first place to begin with suicide prevention. This research suggests that suicide prevention should begin at the primary level and carry through high school and into the student’s transitions into life outside of school. Beginning at the elementary level, all staff can make students feel welcome and connected. School staff can teach students about developmental assets, resiliency, life skills, interpersonal and intrapersonal skills, about mental health and suicide, and where and how to seek help. Beginning at the elementary level, school social workers can train school staff about mental health and suicide, educate staff about what to look for regarding mental health and suicidality and where to go for help. At all school levels, all staff members and gatekeepers can and should be made aware of the risk factors of suicide and how to enhance protective factors and form a source of protection around each student. The research validates this researcher’s previous perceptions and beliefs regarding the importance of suicide prevention policies, programs, and strategies at school.
School-Based Adolescent Suicide Reduction

**Strengths**

The strengths of this survey are that it samples and collects data from a wide range all across Minnesota. It samples school social workers from both rural and urban areas. The survey samples an entire professional organization of school social workers and the sample also includes another school professional who works with adolescent suicidality as a school counselor. Additional strengths of the interviews include the richness and great personal depth in the stories as the interviewees have the opportunity to tell their beliefs, opinions, and impressions of school-based adolescent suicide reduction.

Interviewing only two people can be seen as both a limitation and strength. The two school professionals interviewed are key stakeholders with experience in adolescent suicidality which adds a particular nuance; however the sample is not representative of all professionals who work with adolescent suicide in a school setting.

**Limitations**

Limitations of this study are that it only collects data from one state. The sample is biased towards gender as a greater amount of school social workers are female. A larger sample would be beneficial for a more random sample of school social workers or of other professionals throughout the United States. A limitation may be that the interviewees were selected to take part in this study by the researcher. Although the sample does include one school counselor in addition to the school social workers, it could be beneficial to survey and interview additional school counselors and other school-based mental health providers.
Implications

Implications from this study show the significance for social work practice in the school setting to train and educate staff and students about mental health and suicide and to reduce the stigma that is associated with both. This study shows the importance of implementing a comprehensive kindergarten – 12th grade mental health curriculum, suicide prevention policies, programs and strategies, school-wide mental health and suicide screening, and the significance of increasing awareness about risk factors and the value of enhancing protective factors with students as early as possible in the student’s elementary years. Additional implications from this study include the factors identified and discussed in this study can be utilized for future practice as a basis for school involvement in the reduction of adolescent suicide such as increasing student connectedness, school engagement, high expectations, sense of purpose, and parent and community involvement.

This researcher concludes, from this research, that suicide prevention should begin as early as preschool and kindergarten by talking about and educating about taking care of student’s mental health like we do their physical health. This researcher found schools should provide programs and curriculum that teaches about developmental assets, life skills, interpersonal and intrapersonal skills of each child. This researcher plans to utilize these findings to enhance the suicide prevention policies, programs, and curriculum in her elementary school, the school district as a whole, and promote parent and community involvement. In addition to educating about mental health and reducing the stigma that is associated with mental illness, skill building is essential and this researcher will continue research and curriculum implementation in the area of early prevention.
Conclusion

The purpose of this study was to examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide. Schools play a valuable role helping all students feel safe, valued, and connected at school and also provide an avenue for intervention as adolescents spend the majority of their waking hours at school. Adolescents experiencing suicidal ideations or who are at-risk for suicidal behaviors can benefit from school support. For students who are currently at immediate risk of suicide, schools can identify and assess suicide risk in students and make the necessary referrals and connections to support services outside of school. Schools can and should provide mental health and suicide screening, form connections with students, educate students, staff, and gatekeepers about warning signs of suicide, risk factors and protective factors of suicide, how to decrease risk factors and enhance protective factors at school. Schools can and should work with parents and the community to educate them about mental health and suicide and to work together to support students. Schools can increase awareness of mental health and suicidality and increase communication among students, staff, parents, and the community regarding suicide awareness to help prevent suicidality and decrease the number of students who die by suicide. This study found school social workers surveyed in this state, as a group, believe in the importance of efforts to reduce the number of students who die by suicide.
References


Sources of Strength Program. Retrieved from http://www.sourcesofstrength.org/


Appendix A

**Agency CONSENT FORM**

Researcher: Please provide your agency with the information about your project and have your agency contact complete this form.

Agency: Please read this form and ask any questions you may have before agreeing to allow this study to take place at your agency. Please keep a copy of this form for your records.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>School-Based Adolescent Suicide Reduction</th>
<th>IRB Tracking Number</th>
<th>293910-1</th>
</tr>
</thead>
</table>

General Information Statement about the study:

The aim of this study is to examine school-based preventive programs and how they work with risk and protective factors to help primary, middle, and secondary school students reduce suicidal ideation and behavior. Findings from this study hold the potential to help school social workers and school officials to identify some of the relevant factors and potentially successful strategies other schools might consider.

Your agency is invited to participate in this research. The agency was selected as a host for this study because:

The Minnesota School Social Work Association is comprised of licensed and experienced school social workers who bring a wide variety of school experience.

Study is being conducted by: Sabrina Ulrich
Research Advisor (if applicable): Dr. David Roseborough
Department Affiliation: Graduate Social Work

Background Information
The purpose of the study is:

The purpose of this study is to examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide. This study explores school social workers’ and other school mental health professionals’ experience with suicide prevention and what they perceive schools can do to help reduce the number of students who die by suicide.

Procedures
Study participants will be asked to do the following:

State specifically what the subjects will be doing, including if they will be performing any tasks. Include any information about assignment to study groups, length of time for participation, frequency of procedures,
The MSSWA’s professional membership will be asked about their perceptions, opinions, or impressions in relation to what schools can do to help reduce the number of students who die by suicide in the form of an online survey which should take approximately 10-15 minutes to complete.

**Risks and Benefits of being in the study**

The risks involved for subjects participating in the study are:

There are few possible risks to participation in this study. However, participants taking this survey may be reminded of an episode or student(s) from their own professional experience. This is a topic that may evoke some feelings. Participants can choose how much or little they would like to discuss in their survey responses and are asked exclusively about their professional vs. any personal experience.

The direct benefits the agency will receive for allowing the study are:

There are no direct benefits to participation in this study.

**Compensation**

Details of compensation (if and when disbursement will occur and conditions of compensation) include:

There is no compensation to participate in this study.

**Confidentiality**

The records of this study will be kept confidential. The types of records, who will have access to records and when they will be destroyed as a result of this study include:

Data from the participants’ survey answers will be password protected and administered through Qualtrics Survey Software. The data will be kept on a deidentified spreadsheet with the aggregated quantitative data on it. Participants will be kept anonymous. The study will not link participants' answers back to them individually, though particular quotes may be referenced in the research report summarizing findings, as examples of themes reported by many respondents. In order to ensure the anonymity of survey information, participants will be asked to not put their name or particularly identifying information in any of the answers to the survey. The deidentified spreadsheet will be kept indefinitely on an excel spreadsheet on this researcher’s home password protected computer.

**Voluntary Nature**

Allowing the study to be conducted at your agency is entirely voluntary. By agreeing to allow the study, you confirm that you understand the nature of the study and who the participants will be and their roles. You understand the study methods and that the researcher will not proceed with the study until receiving approval from the UST Institutional Review Board. If this study is intended to be published, you agree to that. You understand the risks and benefits to your organization.

The MSSWA members’ participation in this survey is entirely voluntary. The members’ decision whether or not to participate will no way affect the associations or members’ current or future relations with St. Catherine University or the University of St. Thomas. Data entered on the survey will be included if saved Qualtrics, but will not be linked to an individual.

Should you decide to withdraw, data collected about you will be used in the study.
**Contacts and Questions**
You may contact any of the resources listed below with questions or concerns about the study.

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher name</td>
<td>Sabrina Ulrich</td>
<td><a href="mailto:ulri0613@stthomas.edu">ulri0613@stthomas.edu</a></td>
</tr>
<tr>
<td>Research Advisor name</td>
<td>Dr. David Roseborough</td>
<td><a href="mailto:DJROSEBOROUGH@stthomas.edu">DJROSEBOROUGH@stthomas.edu</a></td>
</tr>
<tr>
<td>UST IRB Office</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Statement of Consent**
I have read the above information. My questions have been answered to my satisfaction and I consent to allow the study to be conducted at the agency I represent. By checking the electronic signature box, I am stating that I understand what is being asked of me and I give my full consent.

☐ Electronic signature

<table>
<thead>
<tr>
<th>Role</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agency Representative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Researcher</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Electronic signatures certify that:*
- The signatory agrees that he or she is aware of the policies on research involving participants of the University of St. Thomas and will safeguard the rights, dignity and privacy of all participants.
- The information provided in this form is true and accurate.
- The principal investigator will seek and obtain prior approval from the UST IRB office for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.
- Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported in writing to the UST IRB office and to the subjects.
- The research will not be initiated and subjects cannot be recruited until final approval is granted.
Appendix B
Letter of Consent
School-Based Adolescent Suicide Reduction

I am a graduate student completing my Master’s of Social Work degree at St. Catherine University and the University of St. Thomas. As part of my graduate education, I am conducting a study on school-based adolescent suicide reduction. I would like to invite you to participate in this research. You were chosen for this study as you are a professional member of the Minnesota School Social Work Association. I am conducting an online survey under the supervision of Dr. David Roseborough, a professor of social work at St. Catherine University and the University of St. Thomas.

The purpose of this study is to examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide. This study explores school social workers’ and other school mental health professionals’ experience with suicide prevention and what they perceive schools can do to help reduce the number of students who die by suicide. If you decide to participate, you will be asked about your perceptions, opinions, or impressions in relation to what schools can do to help reduce the number of students who die by suicide, in the form of an online survey which should take approximately 10-15 minutes to complete.

If you agree to complete this survey, please visit the survey’s website at [to be determined later] and follow the instructions there. Your data will be kept anonymous, so feel free to be candid and honest in your answers to the questions in the survey. The study will not link your answers back to you individually, though particular quotes may be referenced in the research report summarizing findings, as examples of themes reported by many respondents. In order to ensure the anonymity of your survey information, please do not put your name or particularly identifying information in any of the answers to this survey. Please take the time needed to answer all of the survey questions carefully and thoughtfully, however, if you wish, you may stop taking the survey at any time or skip any questions that are difficult or uncomfortable.

Your participation in this survey is entirely voluntary. Your decision whether or not to participate will in no way affect your current or future relations with St. Catherine University or the University of St. Thomas. There are no anticipated risks to your participation in this study, other than it asks you to reflect on your professional experience in regard to a potentially sensitive, but I believe important, topic.

If you have questions about this survey, you may contact me at xxx. You may also contact my research advisor, Dr. David Roseborough, at xxx, or the University of St. Thomas Institutional Review Board at (651) 962-5341 with any questions or concerns.

Thank you very much for your time and attention. Your consideration in participating is much appreciated. If you do decide to take this survey, your participating would serve as consent.

Sincerely,

Sabrina Ulrich
Appendix C

CONSENT FORM

Please read this form and ask any questions you may have before agreeing to participate in the study.
Please keep a copy of this form for your records.

<table>
<thead>
<tr>
<th>Project Name</th>
<th>School-Based Adolescent Suicide Reduction</th>
<th>IRB Tracking Number</th>
<th>293910-1</th>
</tr>
</thead>
</table>

General Information Statement about the study:
The aim of this study is to examine preventative programs, risk factors, and protective factors to help primary, middle, and secondary schools reduce suicidal ideation and behavior. Findings from this study will help school social workers and school officials to identify some of the primary factors identified and discussed in this study as a basis for school involvement in the reduction of student suicide. This research asks what schools can do to reduce the number of adolescent students who die by suicide.

You are invited to participate in this research.
You were selected as a possible participant for this study because:

I am asking you to participate in this interview because of your overall knowledge, skills, and experience working with children and adolescents in a school setting.

Study is being conducted by: Sabrina Ulrich
Research Advisor (if applicable): David Roseborough, Ph.D., LICSW
Department Affiliation: Graduate Social Work

Background Information
The purpose of the study is:

To examine what primary, middle, and secondary schools can do to reduce the number of students who die by suicide.

Procedures
If you agree to be in the study, you will be asked to do the following:
State specifically what the subjects will be doing, including if they will be performing any tasks. Include any information about assignment to study groups, length of time for participation, frequency of procedures, audio taping, etc.

You will be participating in an interview in person or by phone that will take approximately 45-60 minutes to complete. The interview will be audio taped and transcribed.

Risks and Benefits of being in the study
The risks involved for participating in the study are:

There are a few possible risks to your participation in this study. However, you may be reminded of...
an episode or student(s) from your own professional experience. This is a topic that may evoke some feelings. You can choose how much or little you would like to discuss and this researcher will ask explicitly about your professional vs. any personal experience.

<table>
<thead>
<tr>
<th>The direct benefits you will receive from participating in the study are:</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are no direct benefits from participating in this study. However, an executive summary of this study will be provided to you. The factors identified and discussed in this study can potentially be used by you as a basis for school involvement and program implementation for the reduction of student suicide.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compensation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Details of compensation (if and when disbursement will occur and conditions of compensation) include:</td>
</tr>
<tr>
<td>Note: In the event that this research activity results in an injury, treatment will be available, including first aid, emergency treatment and follow-up care as needed. Payment for any such treatment must be provided by you or your third party payer if any (such as health insurance, Medicare, etc.).</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Confidentiality</th>
</tr>
</thead>
<tbody>
<tr>
<td>The records of this study will be kept confidential. In any sort of report published, information will not be provided that will make it possible to identify you in any way. The types of records, who will have access to records and when they will be destroyed as a result of this study include:</td>
</tr>
<tr>
<td>This interview will be audio taped and transcribed. Your name will not be disclosed in the interview, the transcribed interview, data, or reports. Your identity will be kept confidential. Your signed consent form and audio tape will be kept in my office in a locked storage box. Your signed consent form will be shredded and the audio tape will be demagnetized and will be destroyed by May 31, 2012. Written copies of deidentified interviews will be kept indefinitely in the researcher’s home office in a locked storage box.</td>
</tr>
<tr>
<td>The researcher will utilize a triangulation method for interrater reliability by sharing the interview transcripts with a research partner in class. The transcripts will not identify the subjects and identification of subjects will not be accessed by anyone other than the researcher. The transcriber will have access to the audio taped recordings, however, the transcriber will not have access to identifying information and will sign a Transcriber Confidentiality Agreement agreeing to data privacy and confidentiality.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Voluntary Nature of the Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with any cooperating agencies or institutions or the University of St. Thomas. If you decide to participate, you are free to withdraw at any time up to and until the date/time specified in the study.</td>
</tr>
<tr>
<td>You are also free to skip any questions that may be asked unless there is an exception(s) to this rule listed below with its rationale for the exception(s).</td>
</tr>
<tr>
<td>None</td>
</tr>
</tbody>
</table>

| Should you decide to withdraw, data collected about you | will NOT be used in the study |
### Contacts and Questions
You may contact any of the resources listed below with questions or concerns about the study.

<table>
<thead>
<tr>
<th>Role</th>
<th>Contact Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher name</td>
<td>Sahrina Ulrich</td>
</tr>
<tr>
<td>Researcher email</td>
<td><a href="mailto:ulri0613@stthomas.edu">ulri0613@stthomas.edu</a></td>
</tr>
<tr>
<td>Researcher phone</td>
<td></td>
</tr>
<tr>
<td>Research Advisor name</td>
<td>Dr. David Roseborough</td>
</tr>
<tr>
<td>Research Advisor email</td>
<td><a href="mailto:DIROSEBOROUGH@stthomas.edu">DIROSEBOROUGH@stthomas.edu</a></td>
</tr>
<tr>
<td>Research Advisor phone</td>
<td></td>
</tr>
<tr>
<td>UST IRB Office</td>
<td>651.962.5341</td>
</tr>
</tbody>
</table>

### Statement of Consent
I have read the above information. My questions have been answered to my satisfaction and I am at least 18 years old. I consent to participate in the study. By checking the electronic signature box, I am stating that I understand what is being asked of me and I give my full consent to participate in the study.

<table>
<thead>
<tr>
<th>Signature of Study Participant</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Electronic signature</td>
<td></td>
</tr>
<tr>
<td>Print Name of Study Participant</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of Parent or Guardian</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Electronic Signature</td>
<td></td>
</tr>
<tr>
<td>Print Name of Parent or Guardian</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of Researcher</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] Electronic signature*</td>
<td></td>
</tr>
<tr>
<td>Print Name of Researcher</td>
<td></td>
</tr>
</tbody>
</table>

*Electronic signatures certify that...

The signatory agrees that he or she is aware of the policies on research involving participants of the University of St. Thomas and will safeguard the rights, dignity and privacy of all participants.

- The information provided in this form is true and accurate.
- The principal investigator will seek and obtain prior approval from the UST IRB office for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.
- Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported in writing to the UST IRB office and to the subjects.
- The research will not be initiated and subjects cannot be recruited until final approval is granted.
Appendix D

Survey Questions

Demographic questions:
- Age (25 or under, 26-35, 36-45, 46-55, 56 and above)
- Gender (Male or Female)
- Licensure (LSW, LGSW, LISW, LICSW)
- Level of education (BSW or MSW)
- Length of experience as a school social worker (0-5, 6-10, 11-15, 16-20, 21 years or more)
- Setting (Urban or Rural)
- School level (primary, middle, secondary, or other)
- Grades served
- Number of social workers at your school

Please answer yes or no:
1. Does your school implement mental health/suicide screening for your students?
2. Does your school have programming in place for mental health awareness for your students?
3. Does your school have anti-bullying programming in place?
4. Does your school have suicide prevention curriculum in place? If so, what is the name of it?

On a scale of 1-5 with 1 being the lowest and 5 being the highest, please rate the following goals or interventions according to your experience regarding their importance in reduction of the number of adolescents who die by suicide.

1. Educating staff about mental health and suicide
2. Educating students about mental health and suicide
3. Incorporating mental health and suicide screening
4. Incorporating suicide prevention programming
5. Implementing suicide policies district-wide
6. Reducing risk factors of suicide
7. Enhancing protective factors
8. Developing assets
9. Build resiliency
10. Other (please list here)

Please answer according the school setting in which you work.

- What has been your impression of the effectiveness of existing efforts aimed at suicide reduction either at your school or at schools with which you are familiar?
- What do you believe schools can do to reduce the number of students who die by suicide?
School-Based Adolescent Suicide Reduction

- What do you or what does your school specifically do to decrease risk factors of suicidality, if anything such as substance use, disconnectedness, poor academics, or disciplinary problems? (These might be implicit such as reducing the stigma of mental health issues and suicide or explicit such as anti-bullying efforts.)
- What do you or what does your school specifically do to increase protective factors that protect students from suicidality, if anything such as student connectedness, student coping and problem solving skills? (Again, these might be implicit such as a warm environment or explicit such as prevention programming.)
- What do you think strengthens kids and builds resiliency in adolescents?
- In what ways do you build or foster developmental assets; do you target them? (i.e. The 40 Developmental Assets developed by Search Institute include supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, and sense of purpose.)
- If you had all the time and money possibly needed, what school-based efforts would you like to see incorporated to reduce the number of adolescents who die by suicide?
- Is there anything you would like to include that I did not ask?
Appendix E

Interview Questions

Demographic questions:

- Age
- Gender
- Role
- Licensure
- Level of education
- Length of experience
- Urban or rural setting
- School level (primary, middle, or secondary)
- Grades served
- Number of students served
- Number of social workers on staff

Please answer according to the school setting in which you work.

- What has been your impression of the effectiveness of existing efforts aimed at suicide prevention either at your school or at schools with which you are familiar? (i.e. does it seem effective or ineffective? How so?)
- What do you believe schools can do to reduce the number of students who die by suicide?
- Describe efforts your school uses formally or informally to help reduce adolescent suicidality.
- What school-based efforts used in your school do you believe are effective at decreasing student suicidality?
- Does your school incorporate specific suicide prevention programming?
- Does your school implement mental health/suicide screening?
- What do you think are risk factors of adolescent suicidality? (i.e. these might be from your own clinical/work experience or from things you’ve read). How does what you’ve read match or not match with your school-based experience?
- What do you or what does your school specifically do to decrease risk factors of suicidality, if anything such as substance use, disconnectedness, poor academics, or disciplinary problems? These might be implicitly such as reducing the stigma of mental health issues and suicide or explicitly such as anti-bullying efforts.
- What do you think are protective factors that protect students from suicidality? (i.e. what seems to work or be important from your experience?)
- What do you or what does your school specifically do to increase protective factors that protect students from suicidality, if anything such as student connectedness, student coping and problem solving skills? Again, these might be implicit such as a warm environment or explicit such as prevention programming.
- What do you think strengthens kids and builds resiliency in adolescents?
School-Based Adolescent Suicide Reduction

- What ways do you build or foster developmental assets; do you target them? (i.e. the 40 Developmental Assets developed by Search Institute such as supportive relationships, high expectations, school engagement, decision making, self-esteem, interpersonal competence, conflict resolution, or sense of purpose.)
- How do you intentionally build assets with youth? (formally, informally, group, individually)
- What is left to be done to help reduce adolescent suicide?
- If you had all the time and money possibly needed, what school-based efforts would you like to see incorporated to reduce the number of adolescents who die by suicide?
- Are there any comments you made that you would like to discuss further?
- Is there anything you would like to include that I did not ask?

On a scale of 1-5 with 1 being the lowest and 5 being the highest, according to your experience, please rate each goal or intervention regarding its importance in reduction of the number of adolescents who die by suicide.

1. Educating staff about mental health and suicide 1 2 3 4 5
2. Educating students about mental health and suicide 1 2 3 4 5
3. Incorporating mental health and suicide screening 1 2 3 4 5
4. Incorporating suicide prevention programming 1 2 3 4 5
5. Implementing suicide policies district-wide 1 2 3 4 5
6. Reducing risk factors of suicide 1 2 3 4 5
7. Enhancing protective factors 1 2 3 4 5
8. Developing assets 1 2 3 4 5
9. Build resiliency 1 2 3 4 5
10. Other (please list here….) 1 2 3 4 5
Appendix F

Supportive Resources

Curriculum
Signs of Suicide
Lifelines

Additional Programs
Sources of Strength
Got Bounce
Quest
Auto B. Good
Peacemaker Program
Terrific Kids Program
Second Step
More Than Sad video
Youth Frontiers: Courage Retreat
           Respect Retreat

Screening Program
TeenScreen

Additional Resources
40 Developmental Assets through Search Institute
Lifeline phone number (part of the Lifelines Curriculum from Hazelden)
Safe Schools Alert System (Marshall Public Schools uses)
Feelings Checklist (informal)

Student Groups
Students Against Destructive Decisions (SADD)
Gay Straight Alliance (GSA)

National Resources
National Suicide Crisis Number.................................1-800-SUICIDE (784-2433)
National Suicide Prevention Lifeline............................1-800-273-TALK (8255)

National Suicide Prevention Organizations
American Association of Suicidology (AAS)........................202-237-2280
www.suicidology.org

American Foundation for Suicide Prevention. (AFSP)........1-888-333-2377
www.afsp.org
Suicide Awareness Voices of Education (SAVE).......................1-888-511- SAVE (7283)
www.save.org

Suicide Prevention Resource Center (SPRC).............................1-877-438-7772
www.sprc.org