Preservice Teachers’ Knowledge About Supporting Students At Risk for Suicide

By

Adrianne E. Taylor

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The members of the Committee approve the thesis of

Adrianne E. Taylor presented on May 20, 2020

Dr. Jennifer Muehlenkamp, Chair

Dr. Melissa Coolong-Chaffin

Dr. Todd Stephens

APPROVED: ______________________________________

Dean of Graduate Studies
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Adrianne E. Taylor

The University of Wisconsin-Eau Claire, 2020

Under the Supervision of Dr. Jennifer Muehlenkamp

Collaboration among teachers, school psychologists, and other mental health professionals in the schools is critical to provide students who are at risk for suicide with comprehensive resources and support. This study explores preservice teachers’ knowledge of the school psychologist’s role in supporting them while working with students at risk for suicide compared to preservice teachers’ knowledge on other more common school psychologist roles within the school setting. It was hypothesized that participants would not be as knowledgeable about the school psychologist’s role in working with students at risk for suicide compared to their knowledge about the other common school psychologist roles. It was also hypothesized that special education majors would demonstrate more knowledge about the school psychologist’s roles than regular education majors would, and that participants who reported having worked with a
school psychologist in the past would demonstrate more knowledge of the roles of the school psychologists than those who had not. Participants were preservice teachers attending a medium sized university in the Midwest, recruited via email, to complete an anonymous online Qualtrics survey. Results of this study suggest that preservice teachers in this sample do not seem to be aware of the school psychologist’s varied roles within the school, instead perceiving the primary role as one to help with students at-risk for suicide/mental health concerns. Results provide insight into preservice teacher knowledge about the school psychologist’s role in supporting students at risk for suicide and can help future school professionals collaborate more effectively and better support suicidal students.

Jennifer Muehlenkamp, Ph.D

Date
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Introduction

Prevalence and History of Suicide

Suicide is in the top three leading causes of death among adolescents today (Miller & Eckert, 2009; Kalafat, 2003; Katz et al. 2013; Miller, Eckert, & Mazza, 2009; Mo, Ko, & Xin, 2018; Singer, Erbacher, & Rosen, 2018). According to the World Health Organization (2018), 800,000 people die every year by suicide. In the United States, approximately 44,965 people die by suicide every year (American Foundation for Suicide Prevention, 2016) and in Wisconsin over 700 people complete suicide every year (Wisconsin Department of Health Services, 2018). These numbers include youth suicides as well. According to the National Institute of Mental Health (2018), 436 ten to 14-year-olds and 5,723 15 to 24-year-olds died by suicide in the United States in 2016. This an alarming number and a problem for youth that needs to be addressed. Many professionals will argue that school is one place to do so (Singer, Erbacher, & Rosen, 2018; Katz et al., 2013).

Teachers and other school faculty interact with children and adolescents on a daily basis. Teachers especially spend long periods of time with these students during the week. Therefore, teachers and other school staff working directly with students are in a position to make a difference by identifying youth who may be at risk for suicide and connecting them to the appropriate mental health professional in the school, such as a school psychologist. School psychologists are a good resource for teachers who identify a student who is at risk for suicide (National Association of School Psychologists, 2015) because of their preparation in the promotion of mental wellness, making them well-equipped to work with students who are at risk for suicide.
In the mid-1990s, suicide prevention and awareness groups came together to push for a greater national awareness of suicide and the prevention of it. This effort lead to Congress recognizing suicide as a national problem and suicide prevention becoming a national priority (National Strategy for Suicide Prevention, 2012). Following this event, these groups held a conference in Reno, Nevada to create partnerships for promoting suicide prevention, which is identified as the founding event for the modern suicide prevention movement (National Strategy for Suicide Prevention, 2012). In the years following the Reno conference, there have been several key developments in suicide prevention efforts in the U.S., including a monumental legislative accomplishment in 2004, when Senator Gordon Smith pushed through an act for his son who died by suicide called the Garrett Lee Smith Memorial Act (GLSMA). This act created the first federal grant program for suicide prevention; legislating funds to provide grants to states, tribal territories, and institutions of higher education for suicide prevention (National Strategy for Suicide Prevention: Goals and Objectives, 2012).

These historical events created changes in the prevalence of and approach to school-based suicide prevention programs in the United States as well. In 2000, 77% of public schools in the U.S. had a suicide prevention program in place, which was a 52% increase from 1994 (Stein, Kataoka, Hamilton, Schultz, Ryan, Vona, & Wong, 2010). According to the American Foundation for Suicide Prevention (2019), 27 states mandate suicide prevention training for school personnel, 15 states at least encourage training, and 12 states mandate school suicide prevention, intervention, and postvention policies or suicide prevention programming statewide (State Laws: Suicide Prevention in Schools
While much work needs to be done, these are all important steps toward school-based suicide awareness and prevention.

For effective school-based suicide awareness and prevention, staff education on protective and risk factors is likely to be beneficial. Protective factors, such as high self-esteem (Sharaf, Thompson, & Walsh, 2009) and access to peer and family support (Eisenberg & Resnick, 2006), can decrease the risk of suicide. Risk factors, such as psychological disorders, family history of suicide, and sexual orientation minority status to name a few, increase the risk of suicide (Miller, 2011). Youth with less protective factors and more risk factors are the most likely to be at risk for suicide. Mental health problems are a known risk factor for poor academic performance as well as suicide (Masten & Curtis, 2000), whereas strong school connection has been shown to protect against both mental health concerns and suicide risk (McCombs, 2012; Lester & Cross, 2015). Ethically and legally, it is the responsibility of school personnel to take preventative action to promote mental health school-wide (National Association of School Psychologists, 2015). Additionally, if schools want to maintain a positive school climate and a safe environment, the students need to feel that they have adequate resources to meet their mental health needs. Both adequate mental health services and a positive and safe school climate can be promoted through the appropriate use of school-based suicide prevention programs (Singer, Erbacher, & Rosen, 2019). To foster a positive environment with adequate resources in the school, teachers (and other school staff) must first be prepared to identify the students who could benefit from being connected to the appropriate resources, such as the school psychologist.

**Teacher Preparedness to Respond to Suicide Risk**
Unfortunately, there is a dearth of research on teacher preparedness in responding to students who may be at risk for suicide. While teachers are not mental health professionals, they are on the front lines in schools and are often the first to hear of and from students at risk for suicide (Davidson & Range, 1999). They are also often in the best position for spotting the warning signs of suicide (Nadeem, Kataoka, Chang, Vona, Wong, & Stein, 2011). Simple training in the warning signs and appropriate responses to students at risk for suicide could be effective for suicide prevention in the school because it equips teachers with knowledge they can use to detect students at risk. As part of this training, it may also be beneficial for teachers to learn, or be reminded about, the collaborative opportunities available with the school psychologist to help serve students of concern. Existing literature supports the idea that these types of teacher trainings would be beneficial, because we see that teachers working in the field report suicide as being a relevant topic, particularly at the high school level, and a lack of knowledge regarding suicide supports at their schools. For example, Westefeld and colleagues (2007) found that over half of high school teachers in their sample viewed suicide as a problem for high school students, with 78% of teachers knowing an adolescent who attempted or died by suicide, and 73% have had concerns about a specific student being suicidal (Westefeld, Kettmann, Lovmo, & Hey, 2007). Westefeld and colleagues (2007) also found that 67% of teachers in their sample did not know what the procedures at their school were for assisting and responding to a student at risk for suicide, and 40% indicated that they did not know what suicide prevention and postvention resources were available at their school (Westefeld et al., 2007). These findings highlight the need for more suicide awareness training and communication with teachers about what resources
and policies are available in the school; clearly suicide is an issue that teachers are faced with but often feel unprepared to respond to. Including more education on suicide risk, awareness, and prevention in preservice teachers’ curricula may better prepare them for aiding students at risk for suicide when they enter the field. As part of this training, including information on which school professionals teachers can refer a student at risk for suicide to, as well as consult with regarding concerns about students at risk for suicide would likely be beneficial.

Teachers reporting feeling underprepared to identify and work with a student who is at risk for suicide is not common only to teachers in the United States. International research further indicates training for teachers in suicide prevention and postvention is necessary. In a study of teachers from Hong Kong, Chan (2002) found that teachers felt underprepared to handle suicide prevention and students at risk for suicide. Similarly, results from a study in Australia (Ross, Kölves, & De Leo, 2017) showed that teachers felt unprepared to work with students engaging in non-suicidal self-injury (NSSI), which is an important risk factor for suicide (Klonsky, May, & Glenn, 2013). In a study conducted in Ireland (McConnellogue & Storey, 2017), results indicated that teachers felt confident in their knowledge of basic facts about suicide including warning signs, basic listening skills, and making connections to interact with students at risk for suicide. However, the teachers in this sample also reported common difficulties they faced such as a change in their relationship with the student after making a referral, loss of control after referring a student to a service outside of school, and tension between upholding professional and legal standards and being personable and judgement-free with a student at risk for suicide (McConnellogue & Storey, 2017). If teachers around the world report
that suicide is a relevant concern in their schools but also that they feel unprepared to address it, this further underscores the need for more teacher training on identification of students at risk for suicide, the procedures and resources available to them in their schools, and who to refer a student at risk for suicide to. The more knowledge we can equip school professionals with, the better we will be able to effectively support students at risk for suicide, and school psychologists can play an essential role in equipping schools.

The School Psychologist’s Role

School psychologists are trained to support students academically, behaviorally, socially, and emotionally. School psychologists can also provide support and resources to new and seasoned teachers for supporting students at risk for suicide (National Association of School Psychologists, 2015). School psychology graduate programs are required to include course content covering suicide prevention and postvention according to policies of the National Association of School Psychologists (NASP). NASP’s website offers advice on where and how to implement suicide prevention resources (NASP, 2018); however, most school psychologists receive the majority of their suicide prevention and postvention training from workshops and conferences once already working in the field (Debski, Spadafore, Jacob, Poole, & Hixson, 2007). NASP promotes the PREPaRE model, which stands for prevent, reaffirm, evaluate, provide, and, respond, and examine (NASP, 2017). This model is provided for practicing school psychologists as an example of the roles they can and are often expected to fill in their school in terms of suicide prevention and postvention, as well as their role with the crisis response team. The unique graduate education that school psychologists have combined with the
trainings offered at conferences and workshops prepares them to play a key role in responding to students at risk for suicide.

Specifically, school psychologists are often called upon to conduct suicide risk assessments to determine the level of risk for a student based on their graduate training in administering and interpreting a variety of assessment tools. In addition, school psychologists can assess protective and risk factors of students at risk for suicide (Lieberman, Poland, & Kornfeld, 2014) and are likely to be knowledgeable about risk and protective factors for suicide. Therefore, school psychologists are often consulted with to provide insight to the level of suicide risk a student may be experiencing (National Association of School Psychologists, 2014). Along with providing direct assessment and intervention with at risk students (tier 3 strategies), school psychologists can advocate for (and possibly help provide) systems-level screening programs that train staff to recognize suicide risk and suicidal ideation in students and increase coping skills; all of which have been proven to be successful Tier 1 strategies (Lieberman, Poland, & Kornfeld, 2014). School psychologists can lead the development of protocols for the school that outline the steps to take and who should be involved when working with potentially suicidal students. These protocols are most effective if they include information on risk assessments, contacting parents, documentation, making referrals, and follow-up support (Lieberman, Poland, and Kornfeld, 2014). All of the roles and skills that have been discussed are valuable tools that equip school psychologists to be able to support students at risk for suicide, as well as support teachers in both identification and referral of students they are concerned about.

**Collaboration Between School Professionals**
While teacher training is crucial to adequately supporting students at risk for suicide, school suicide prevention and postvention best serves students when it is approached collaboratively among school staff. According to Nadeem and colleagues, communication and collaboration with other staff were important factors that increased teacher participation, and comfort with, suicide prevention (Nadeem, Kataoka, Chang, Vona, Wong, & Stein, 2011). If teachers are aware of the support school psychologists provide and feel comfortable reaching out to the school psychologist for help, they may be more willing to take on a suicide prevention role. Then, if classroom teachers are equipped with the knowledge and tools necessary to play the gatekeeper role, they can identify the warning signs of an at-risk student, and help to ensure that the student is connected with the appropriate school staff member, such as the school psychologist, to be formally assessed for risk.

In order for school professionals to effectively collaborate around students at risk for suicide, there is a need to understand what new and preservice teachers know about the school psychologist’s role in suicide prevention as well as their beliefs about how the school psychologist can support them when working with students at risk for suicide. By teaming up with other mental health professionals in the schools, school psychologists and teachers can find effective ways to collaborate and utilize each other’s roles and skills to maximize prevention effectiveness for their students. Collaboration among teachers, school psychologists, and other mental health professionals in the schools is critical to provide students with comprehensive resources and support. To facilitate this collaboration, teachers and other school professionals must be aware of the services and skills that each other can provide. The ideal time to introduce the roles of the school
psychologist and how they support teachers within school settings is during teacher training at the undergraduate level. There is a dire need for research exploring what information university education programs provide undergraduate preservice teachers regarding the role of the school psychologist in schools and supporting them. Knowing what information about school psychologists that new teachers enter the field with could provide guidance for school professionals on how to best collaborate in order to support students at risk for suicide when they begin working together in the schools, which has partially fueled the reason behind this study.

Based on the importance of collaboration among school professionals around students at risk for suicide and the need for research investigating what information preservice teachers receive during their undergraduate coursework about the school psychologist, this study aims to explore the knowledge of preservice teachers regarding how the school psychologist can support them when working with students who are at risk for suicide. It was hypothesized that preservice teachers would have less knowledge about the school psychologist’s role in working with students at risk for suicide than about the school psychologist engaging in other common roles (e.g. behavior support, academic support, and special education referral). It was also hypothesized that participants who reported being special education majors (versus regular education majors) would report more knowledge of the school psychologist’s role working with students at risk for suicide. Lastly, it was hypothesized that preservice teachers who reported having worked with a school psychologist previously will score higher on all measures of knowledge regarding all of the roles of a school psychologist. Additional information was collected on participants’ perceived helpfulness and comfort with school
psychologists, which helped inform participants’ level of understanding of the role of a school psychologist.
Method

Participants

Participants were 181 undergraduate students. All participants were education majors (preservice teachers) in either a regular education or special education undergraduate program at a medium-sized public university in the Midwest. Participants’ mean age was 20.6 (SD=1.29). There were 22 participants who identified as male (12%) and 153 females (85%); one participant reported to be gender fluid, two participants identified as transgender, two reported their gender as “other,” and one participant selected that they preferred not to answer. When asked to report on race, 96.7% of participants reported being White/Caucasian, 1.7% were Latinx, and 1.7% were “other.” Upon being asked to report their major, 75.1% of participants reported that they were regular education majors, and 24.9% were special education majors or double special education and regular education majors. Twenty-one participants were dropped due to insufficient data (e.g. over 50% of responses were missing), and one participant was dropped because their data response pattern indicated they only took the survey to enter the drawing for the incentive (see Table 1).
Table 1. *Participant demographics.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>22</td>
<td>12%</td>
</tr>
<tr>
<td>Female</td>
<td>153</td>
<td>85%</td>
</tr>
<tr>
<td>Transgender</td>
<td>2</td>
<td>.01%</td>
</tr>
<tr>
<td>Gender Fluid</td>
<td>1</td>
<td>.001%</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>.01%</td>
</tr>
<tr>
<td>Prefer not to answer</td>
<td>1</td>
<td>.001%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 or younger</td>
<td>46</td>
<td>25%</td>
</tr>
<tr>
<td>20 years old</td>
<td>46</td>
<td>25%</td>
</tr>
<tr>
<td>21 years old</td>
<td>38</td>
<td>21%</td>
</tr>
<tr>
<td>22 years old</td>
<td>36</td>
<td>20%</td>
</tr>
<tr>
<td>23 or older</td>
<td>15</td>
<td>8%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>175</td>
<td>98%</td>
</tr>
<tr>
<td>Latinx</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td><strong>Major</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Regular Education Major</td>
<td>136</td>
<td>75%</td>
</tr>
<tr>
<td>Special Education Major</td>
<td>45</td>
<td>25%</td>
</tr>
<tr>
<td><strong>History Working With School Psychologist</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>27</td>
<td>15%</td>
</tr>
<tr>
<td>No</td>
<td>126</td>
<td>70%</td>
</tr>
</tbody>
</table>
Procedure

The research design of this study was non-experimental and correlational. Participants were recruited by email to complete the anonymous survey. Participation was voluntary and took about 10 minutes. Emails of preservice teachers, excluding those in their first year of school, were obtained from the Office of Institutional Research at the university where the study was conducted. First year preservice teachers were excluded since they likely had not been an education major long enough to have been exposed to information on school psychologists or have had the opportunity to work with one through a student teaching position.

Preservice teachers were sent an email that included a link to the study from the primary researcher’s university email address inviting them to participate in the study. To help increase participation, two reminder emails were sent two and a half weeks and three weeks after the initial invitation email. The survey stayed open for five weeks. Participants interested in the study clicked on the study link imbedded in the invitation email, which then opened to the informed consent screen for the study. Informed consent was obtained before the participants began the survey. After reading about the general purpose of the study, risks and benefits to participation, and contact information for the primary researcher and the chair of the Institutional Review Board, participants chose whether or not they agreed to participate. Participants who agreed to participate were taken to the beginning of the survey, responded to the survey items, and were debriefed upon completion. After seeing the debriefing statement, interested participants followed a link to an external one-item survey where they provided their email to be entered to win a study incentive.
Measures

Demographics: A demographic questionnaire was created for this study and assessed participant gender, age, race/ethnicity, year in school, and major (e.g. special education or regular education). Participants were also asked to report if they personally know a school psychologist or if they have had the opportunity to work with a school psychologist in their educational experience thus far.

Knowledge of School Psychologist Roles: To assess participant knowledge of the school psychologist’s roles (i.e. working with students at risk for suicide, helping with students who need additional behavior support, helping students who need extra academic support, and special education referral), a series of items assessing the activities performed by school psychologists for each role were created for the purpose of this study. For example, one item for students at risk for suicide asked: based on your current knowledge, how likely is it that a school psychologist would engage in the roles listed below when working with a student at risk for suicide? (see Appendix A for full survey). Items asking about the different roles of the school psychologist had acceptable internal reliability across each role (working with students at risk for suicide: Cronbach’s α=.928; Working with students being referred for special education: Cronbach’s α=.888; Involvement with students needing additional academic support: Cronbach’s α=.894; Involvement with students who need additional behavioral support: Cronbach’s α=.819). To calculate a scale score, items asking about each role assessed were combined and then divided by four to create a knowledge variable for each of the four roles being compared.

Staff Utilization Based on Student Needs: To gather information on which school professionals preservice teachers may utilize given student concerns, participants also
answered questions asking who they would contact first for each student need assessed (i.e. behavior support, academic support, at risk for suicide, and special education referral). A variety of staff positions were provided (e.g. principal, another teacher, school counselor, guidance counselor, school psychologist, nurse, other) for each student need.

*Comfort and Helpfulness of School Psychologists:* To explore participants’ comfort approaching the school psychologist at their future school, participants indicated their level of comfort on a 10-point Likert scale (e.g. 1=not at all comfortable to 10=very comfortable). To gather information on how helpful participants believed school psychological services are regarding different student needs (i.e. behavior support, academic support, suicide risk status, and special education referral), participants answered a 10-point Likert scale question about how helpful the school psychologist would be (e.g. 1=not helpful at all to 10=very helpful) regarding each type of student need (see Appendix A).
Results

The Statistical Package for Social Sciences 24.0 (SPSS) was used for all analyses. Prior to any analyses, the data was inspected for quality by calculating and reviewing descriptive summaries of item responses to check for missingness, invalid responses, and non-normality. As a result of data inspection, 21 participants were deleted due to less than a 50% response rate, and one data point was deleted due to clearly invalid responding (e.g., a participant who reported their gender to be “cat” and their race to be “Siamese cat”). Due to the already small sample size and need to preserve as much usable data as possible, individual items with missing data were replaced with the mean responses for that item (Field, 2017), resulting in a total of 22 unique data points being imputed.

Data Analyses to Evaluate Hypotheses

To test the first hypothesis that participants would be less knowledgeable about the school psychologist’s role in working with students at-risk for suicide than they would be about the school psychologist’s role in academic support, behavior support, and special education referral a paired-samples t-test was used to compare participants’ mean knowledge of each role. A paired samples t-test was used because it is the appropriate statistic for analyzing differences in means for the same individual on continuous variables (e.g. the same person’s knowledge about the school psychologists role working with students at risk for suicide compared to their knowledge of the school psychologist’s role in special education referral) (Field, 2017). Results from the paired-samples t-test did not support the hypothesis. Participants reported more knowledge about the school psychologist working with students at-risk for suicide (mean=7.85, SD=1.96) relative to
the school psychologist’s role working with special education referrals (mean= 7.18, SD=2.15; $t_{(180)}=3.92, p < .001$; mean difference 95% CI: 0.33 to 1.0), students who need behavior support (mean=7.49, SD=1.69; $t_{(180)}=2.45, p=.15$; mean difference 95% CI: 0.07 to 0.66), and academic support (mean=6.77, SD=2.12; $t_{(180)}=6.43, p<.001$; mean difference 95% CI: 0.75 to 1.14), although most of the effects were small (see Table 2).

Table 2. Reported knowledge of the different roles of the school psychologist.

<table>
<thead>
<tr>
<th>Comparison Pairs</th>
<th>Mean-1 (SD)</th>
<th>Mean-2 (SD)</th>
<th>Difference (SD)</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide (1) vs. SPED (2)</td>
<td>7.85 (1.96)</td>
<td>7.18 (2.15)</td>
<td>0.66 (2.28)</td>
<td>3.92</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Suicide (1) vs. Acad (2)</td>
<td>7.85 (1.96)</td>
<td>6.77 (2.12)</td>
<td>1.08 (2.26)</td>
<td>6.43</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Suicide (1) vs. Behavior (2)</td>
<td>7.85 (1.96)</td>
<td>7.49 (1.69)</td>
<td>0.36 (1.99)</td>
<td>2.45</td>
<td>.15</td>
</tr>
</tbody>
</table>

Note: Suicide = at-risk for suicide, SPED = referral for special education, Acad = academic support, and Behavior = behavior support; significant results are in bold.

The second hypothesis examined whether special education majors would be more knowledgeable about the school psychologist’s role in working with students at-risk for suicide, as well as other roles, than regular education majors. To analyze this hypothesis, an independent samples t-test was used to determine whether there was a meaningful discrepancy between the knowledge of special education majors and regular education majors. An independent samples t-test was used because it is the appropriate statistic for analyzing whether a difference exists on two continuous variables between
mutually exclusive groups (e.g. special education majors and regular education majors) (Field, 2017). Results from the independent samples t-test indicate that this hypothesis was not supported. Across all the analyses, regular education majors and special education majors reported relatively similar knowledge regarding the school psychologist’s role working with students at-risk for suicide ($t_{(72.2)}=1.16, p=0.26$; mean difference 95% CI: -0.30 to 1.08), as well as the other problem areas/roles (see Table 3).

Table 3. Differences in reported knowledge about the school psychologist’s roles between special education majors and regular education majors.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Reg Ed Major</th>
<th>Special Ed Major</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-Risk Suicide</td>
<td>7.95 (1.94)</td>
<td>7.56 (2.04)</td>
<td>1.29</td>
<td>.263</td>
</tr>
<tr>
<td>Academic Support</td>
<td>6.76 (1.98)</td>
<td>6.80 (2.50)</td>
<td>-.095</td>
<td>.925</td>
</tr>
<tr>
<td>Behavior Problems</td>
<td>7.41 (1.65)</td>
<td>7.73 (1.83)</td>
<td>-1.05</td>
<td>.297</td>
</tr>
<tr>
<td>Special Ed Referral</td>
<td>7.04 (2.17)</td>
<td>7.63 (2.03)</td>
<td>-1.67</td>
<td>.098</td>
</tr>
</tbody>
</table>

Note. Reg Ed Major = Regular Education Major (n = 136); Special Ed Major = Special Education Major (n = 45); all significant differences are in bold.

The third hypothesis was that participants who indicated having worked with a school psychologist, for example at a student teaching placement, prior to taking the survey would be more knowledgeable of the school psychologist’s role in working with students at-risk for suicide (and the other roles) than participants who indicated that they
have not worked with a school psychologist before. An independent samples t-test was used to analyze this hypothesis as well, because of the two distinct groups, to determine whether there was a statistical difference between the continuous outcomes of knowledge (Field, 2017). Results revealed that participants who reported having worked with a school psychologist reported greater knowledge of the school psychologist’s role in three of the four areas relative to those who had not worked with a school psychologist, including academic support (t_{42}=4.32, p<.01; mean difference 95% CI: 0.93 to 2.56), behavior support (t_{40}=4.05, p<.01; mean difference 95% CI: 0.67 to 1.99), and special education referral (t_{36.5}=2.58, p=.01; mean difference 95% CI: 0.26 to 2.16). The difference between groups regarding knowledge for students at-risk for suicide was not significant (t_{42.4}=0.93, p=.36; mean difference 95% CI: -0.39 to 1.05) (see Table 4).

Table 4. *Mean reported knowledge of participants who have worked with a school psychologist before and those who had not regarding the roles of the school psychologist.*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Yes: SP Mean (SD)</th>
<th>No: SP Mean (SD)</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>At-Risk Suicide</td>
<td>8.25 (1.63)</td>
<td>7.92 (1.89)</td>
<td>.929</td>
<td>.358</td>
</tr>
<tr>
<td>Academic Support</td>
<td>8.19 (1.85)</td>
<td>6.45 (2.12)</td>
<td>4.32</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Behavior Problems</td>
<td>8.57 (1.53)</td>
<td>7.24 (1.65)</td>
<td>4.05</td>
<td><strong>.000</strong></td>
</tr>
<tr>
<td>Special Ed Referral</td>
<td>8.17 (2.24)</td>
<td>6.96 (2.10)</td>
<td>2.58</td>
<td><strong>.014</strong></td>
</tr>
</tbody>
</table>

Note. Yes: SP = Has worked with a school psychologist before (n = 27); No: SP = Has not worked with a school psychologist before (n = 126); all significant differences are in bold.
To gain more information about which school personnel participants would reach out to first for concerns regarding student suicidality, academic challenges, behavioral challenges, or special education concerns, cross tabs with chi square analyses were used. These analyses helped reveal the frequencies of responses about whom participants would contact first for the four possible roles of the school psychologist. Chi square analyses were chosen for this analysis because it is the appropriate statistic to determine whether there is an association between categorical variables (Field, 2017). Results show that out of the 172 participants who answered these questions, they endorsed contacting the school psychologist first (n=58) for a student who is at-risk for suicide in an equal proportion to contacting the school psychologist first for a student needing referral to special education services (n=70; $\chi^2 (30, N=172)=32.48, \ p=.35$, Cramer’s V=0.19). For both a student at risk for suicide and those needing special education referral, participants reported contacting school psychologist first more so than contacting the principal, another teacher, school counselor, school nurse, or someone else. Most participants reported that they would contact another teacher first when faced with a student who engages in challenging behaviors in the classroom compared to a student at risk for suicide ($\chi^2 (25, N=166)=29.59, \ p=.24$, Cramer’s V=0.24). A similar pattern was observed for when a student appears to need extra academic supports relative to a student at risk for suicide ($\chi^2 (25, N=170)=38.01, \ p=.05$, Cramer’s V=.05). For both challenging behaviors and academic support, fewer participants endorsed contacting the school psychologist first about assistance/support (see Table 5).
Table 5. *Rates of which school professional participants would contact first regarding each type of student concern.*

<table>
<thead>
<tr>
<th>Role</th>
<th>At-Risk Suicide</th>
<th>SPED</th>
<th>Academic</th>
<th>Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal</td>
<td>13</td>
<td>19</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Teacher</td>
<td>7</td>
<td>29</td>
<td>57</td>
<td>69</td>
</tr>
<tr>
<td>School Couns.</td>
<td>29</td>
<td>20</td>
<td>27</td>
<td>21</td>
</tr>
<tr>
<td>Guidance Couns.</td>
<td>53</td>
<td>15</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>School Psych</td>
<td>58</td>
<td>70</td>
<td>27</td>
<td>29</td>
</tr>
<tr>
<td>Other Staff</td>
<td>11</td>
<td>19</td>
<td>17</td>
<td>9</td>
</tr>
</tbody>
</table>

Note: At-Risk Suicide = at-risk for suicide, SPED = referral for special education, Academic = academic support, Behavior = behavior support. Teacher = another teacher, School Couns. = school counselor, Guidance Couns. = guidance counselor, School Psych = school psychologist.

To explore participants’ perceived comfort and helpfulness of utilizing their future school psychologist once in the field, a paired samples t-test was used to analyze participant comfort and perceived helpfulness of the school psychologist as a resource for each possible role relative to comfort and perceived helpfulness in assisting with a student at risk for suicide. Results of the paired samples t-test revealed that participants reported being more comfortable approaching the school psychologist regarding a student who: may be at-risk for suicide than about a student who may need to be referred for special education services ($t_{(171)}=3.81, p<.01$; mean difference=0.61, 95% CI: 0.29 to
needs extra support academically \((t_{169}=7.05, p<.01; \text{mean difference}=1.37, 95\% \text{ CI}: 0.99 \text{ to } 1.75)\), or is exhibiting behavioral challenges in the classroom \((t_{165}=6.17, p<.01; \text{mean difference}=0.96, 95\% \text{ CI}: 0.66 \text{ to } 1.27)\). In addition, participants reported that they think a school psychologist would be more helpful when working with a student at risk for suicide compared to working with a student in need of special education referral \((t_{171}=2.57, p=.011; \text{mean difference}=0.47, 95\% \text{ CI}: 0.12 \text{ to } 0.82)\), needing extra behavior support \((t_{166}=5.47, p<.01; \text{mean difference}=0.87, 95\% \text{ CI}: 0.57 \text{ to } 1.21)\), or needing additional academic support \((t_{169}=7.34, p<.01; \text{mean difference}=1.49, 95\% \text{ CI}: 1.09 \text{ to } 1.89)\) (see Table 6).

Table 6. Participants’ perceived helpfulness of and comfort with the school psychologist helping with each type of student concern.

<table>
<thead>
<tr>
<th>Comparison Pairs</th>
<th>Mean-1 (SD)</th>
<th>Mean-2 (SD)</th>
<th>Difference (SD)</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide (1) vs. SPED (2)</td>
<td>7.91 (1.88)</td>
<td>7.44 (2.02)</td>
<td>0.47 (2.38)</td>
<td>2.57</td>
<td>.011</td>
</tr>
<tr>
<td>Suicide (1) vs. Acad (2)</td>
<td>7.88 (1.95)</td>
<td>6.39 (2.23)</td>
<td>1.49 (2.64)</td>
<td>7.34</td>
<td>.00</td>
</tr>
<tr>
<td>Suicide (1) vs. Behavior (2)</td>
<td>7.97 (1.88)</td>
<td>7.08 (1.93)</td>
<td>0.89 (2.09)</td>
<td>5.47</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Comparison Pairs</th>
<th>Mean-1 (SD)</th>
<th>Mean-2 (SD)</th>
<th>Difference (SD)</th>
<th>t-value</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suicide (1) vs. SPED (2)</td>
<td>8.22 (1.94)</td>
<td>7.60 (2.06)</td>
<td>0.61 (2.10)</td>
<td>3.81</td>
<td>.000</td>
</tr>
<tr>
<td>Suicide (1) vs. Acad (2)</td>
<td>8.24 (1.94)</td>
<td>6.86 (2.16)</td>
<td>1.37 (2.54)</td>
<td>7.05</td>
<td>.000</td>
</tr>
<tr>
<td>Suicide (1) vs. Behavior (2)</td>
<td>8.30 (1.87)</td>
<td>7.34 (1.99)</td>
<td>0.96 (2.01)</td>
<td>6.17</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note: Helpfulness = participant perceived helpfulness of the school psychologist (n=172); Comfort = participant comfort approaching future school psychologist (n=172); all significant differences are in bold.
Perceived helpfulness of the school psychologist and the participant’s comfort approaching the school psychologist were positively and significantly correlated with one another for working with students at-risk for suicide, behavior support, academic support, and needing a special education referral (see Table 7); suggesting that the more comfortable a participant reported they are working with a school psychologist, the more likely they are to perceive the school psychologist as helpful.

Table 7. Correlations between participants’ perceived helpfulness and comfort approaching their future school psychologist regarding student concerns.

<table>
<thead>
<tr>
<th></th>
<th>Helpfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Suicide</td>
</tr>
<tr>
<td>I. Comfort Suicide</td>
<td>.659</td>
</tr>
<tr>
<td>II. Comfort SPED</td>
<td>.245</td>
</tr>
<tr>
<td>III. Comfort Academic</td>
<td>.180</td>
</tr>
<tr>
<td>IV. Comfort Behavior</td>
<td>.374*</td>
</tr>
</tbody>
</table>

Note. Suicide=concern that a student is at risk for suicide, SPED=possibility of a special education referral, Academic=extra academic support, Behavior=behavior support.
Discussion

This study aimed to explore the knowledge of undergraduate education majors regarding the school psychologist’s role working with students at risk for suicide. Using an online Qualtrics survey, participants answered questions assessing their knowledge of not only the school psychologist’s role working with students at risk for suicide, but also their knowledge of the school psychologist’s role working with students who need additional behavior support, additional academic support, or who may need to be referred for special education services. Overall, it was found that contrary to the hypothesis, participants reported less knowledge about the school psychologist’s roles working with students being referred for special education, who need behavior support, and who need academic support compared to their role working with students at risk for suicide. While it is a positive that preservice teachers are aware that school psychologists are involved in suicide prevention, it is surprising that they report to be more knowledgeable about this role than behavior support, academic support, or special education referral. This highlights the need to enhance preservice teachers’ knowledge of the variety of roles the school psychologist has in the school setting.

While contradictory to hypotheses, the finding that pre-service teachers were more knowledgeable about school psychologist’s role with students at-risk than other academic concerns make sense when considered within a broader context of the training education majors may or may not receive about school psychologists. One potential explanation for the contradictory findings is that there may be a misperception that school psychologists are a school-based equivalent to clinical or counseling psychologists, focusing primarily on student mental health concerns. The education majors in the current sample may hold similar stereotyped views of school psychologists, possibly
explaining the reported higher knowledge regarding the school psychologist’s role working with students at risk for suicide compared to the other common roles of the school psychologist. However, there is a lack of research on this potential misconception of school psychologist roles, and there may be other reasons for the observed findings. Another possible reason for the contradictory results may be the commonalities between the professions of school psychology and school counseling, which can be confusing for many (Capella University, 2019). Given the similar roles and responsibilities and even the professional label between school psychologists and school counselors, it makes sense people unfamiliar with the multiple roles school psychologists have in the school would assume they are the primary person for responding to at-risk students. Supporting this idea, we saw that participants equally chose the school counselor and school psychologist as the first person they would contact regarding a student at risk for suicide. Lacking education or training about what school psychologists do within a school may also lead to preservice teachers relying on stereotyped understandings and within the current sample, only 18% reported having experience with or personally knowing a school psychologist. Thus, it is possible that a lack of exposure to school psychologists and the varied roles they take on in a school contributes to the lower knowledge of school psychologists’ roles in helping students with academic and behavioral concerns relative to students at risk for suicide.

Contrary to the second hypothesis, results suggest that participants who reported themselves as special education majors, as opposed to regular education majors, did not report more knowledge regarding any of the four roles of the school psychologist (e.g. working with students at risk for suicide, students needing special education referral,
additional academic support, and behavior support). Collectively, the two results show that while participants perceive school psychologists to be more involved with students at risk for suicide; the perceived knowledge about the role school psychologists have regarding other student concerns (academic, behavioral, special education) does not meaningfully differ between education major type (e.g. special education major or regular education major). This suggests that the training pre-service education majors do receive about school psychologists, regardless of specialty, is consistent as they reported similar levels of knowledge on the school psychologist’s roles across all the categories assessed. Given that school psychologists are often involved in the individualized education plan (IEP) process for special education students, and therefore collaborate often with special education teachers in the field, it is reasonable to suspect that special education majors in teacher training programs may receive more information regarding the school psychologist in general. However, this was not the case for the current sample. This could be because the preservice teachers in the current sample are still early in their training and may not have yet experienced a school psychologist in the school setting.

Additionally, special education majors and regular education majors in the current sample did not differ in their knowledge of the school psychologist’s role working with students at risk for suicide. This means that like the similarities in knowledge regarding the other three roles of the school psychologist (e.g. academic support, behavior support, special education referral), special education majors and regular education majors are likely receiving similar amounts of information regarding the school psychologist’s role working with students at risk for suicide. Providing education and training around how to use the school psychologist as a resource given the type of student concern is important.
for teachers to know prior to entering the field because it can enhance collaboration from
the get-go. Providing training and exposure to the different roles school psychologists
serve in the school, including their role in supporting students at risk, is especially
important for preservice teachers who will work with older students, because many
teachers working at the high school level feel underprepared to respond to students at risk
for suicide (Westefeld, Kettmann, Lovmo, & Hey, 2007; Chan, 2002; Ross, Kölves, &
De Leo, 2017; McConnellogue & Storey, 2017). Thus, knowing that school psychologists
can help with students at risk for suicide can help teachers feel, and be, better supported
when they face such concerns with their students.

While there were no differences between regular education majors and special
education majors on perceived knowledge of the roles of the school psychologist,
analyses did find significant differences among participants who had worked with a
school psychologist and those who had not. Specifically, participants who reported
having interacted with a school psychologist in the past reported more knowledge about
the role of the school psychologist working with students who need behavior support,
academic support, or special education referral relative to participants who had not
worked with a school psychologist in the past. Participants who had worked with a school
psychologist reported similar knowledge regarding the school psychologist’s role
working with students at risk for suicide compared to participants who reported having
not interacted with a school psychologist in the past. Thus, working with a school
psychologist may not have added to, nor challenged, beliefs that the school psychologist
is involved with students who have mental health concerns, including signs that they may
be at risk for suicide. However, having interacted with a school psychologist in the past
seems to have provided added knowledge about the other roles the school psychologist has within the schools. Given the results from the first two hypotheses, these differences in reported knowledge suggest that the preservice teachers in this sample may not have accurate or abundant knowledge of the school psychologist’s role until they have interacted with a school psychologist (e.g. through a student teaching placement or their first job). If teachers are first being exposed to the roles of the school psychologist once in the schools, this further supports the idea that information about the school psychologist may not be incorporated in their preservice course material or, that they may lack experiential opportunities in their school placements. Exposing preservice teachers to the school psychologist’s roles, especially regarding students at risk for suicide, prior to working in the field is likely to increase their participation and comfort with suicide prevention (Nadeem, Kataoka, Chang, Vona, Wong, & Stein, 2011). Early exposure may also increase teacher comfort working with the school psychologist to address other student concerns. The current findings suggest that teacher education programs may want to consider providing preservice teachers with more information regarding school psychology or encouraging preservice teachers to interact with the school psychologists at their student teaching placement sites. Doing so could help preservice teachers feel more comfortable and increase their willingness to participate in collaborating with the school psychologist in general, but also in school-wide student suicide prevention efforts.

To gain more information on how participants perceived the role of their future school psychologist, participants were asked to report who they would contact first (e.g. school psychologist, principal, another teacher) regarding each of the four student concerns (e.g. at risk for suicide, behavior challenges, academic support, or special
education referral). Results indicate that participants proportionately endorsed contacting the school psychologist over other school professionals regarding students at risk for suicide and students who may need special education referral. However, fewer participants endorsed contacting the school psychologist first regarding academic or behavior concerns relative to other school professionals (e.g., another teacher was endorsed most frequently for being contacted first regarding behavior concerns). These results are consistent with the other analyses conducted, suggesting that the preservice teachers in this sample may perceive the school psychologist as being more involved with student mental health needs and special education related circumstances and less involved with consultation around academic and behavior concerns. School psychologists receive extensive training through graduate coursework related to problem-solving around academic and behavioral concerns (National Association of School Psychologists, 2010) and can be a collaborative resource for teachers who have academic or behavior concerns for a student. These results further highlight the importance of preservice teacher understanding what school psychologists do so that school professionals can take a team approach to supporting students in the schools across multiple academic, behavioral, and mental health concerns that may arise.

Because school psychologists are a great resource for consultation in the school setting, it is important to understand if preservice teachers know enough about the school psychologist’s roles to feel comfortable seeking them out as a resource. To explore participants’ perceived comfort working with a school psychologist once in the field, participants were asked to rate how comfortable they feel approaching their future school psychologist about each type of student concern (e.g. at risk for suicide, behavior,
academic, or special education). Results indicate that participants feel most comfortable approaching the school psychologist regarding students they suspect to be at risk for suicide compared to students who need academic support, behavior support, or a special education referral. This makes sense because the more knowledge one has about another school professional’s roles with students, the more likely they are to feel comfortable approaching their colleague for help. Therefore, to increase preservice teachers’ comfortability approaching the school psychologist regarding a variety of student challenges, preservice teachers need to know the school psychologist has the training to help them with it in the first place (Nadeem et al., 2011). To increase effective collaboration as soon as possible between teachers and school psychologists in schools, ideally teachers would receive information regarding the school psychologist as a resource before they enter the field.

In addition, participants reported that they perceive the school psychologist would be most helpful regarding students at risk for suicide compared to students who need behavior support, extra academic support, or special education referral. This finding is encouraging for suicide prevention efforts and may suggest that participants feel more comfortable approaching their future school psychologist about at risk students because they believe the school psychologist will be helpful. Participants’ comfort approaching the school psychologist about students at risk for suicide is likely because working with students at risk for suicide may be seen as more related to the expertise of a school psychologist compared to working with students who need additional academic support, behavior support, or a special education referral. While it is important for preservice teachers to identify the school psychologist as a resource for students at-risk for suicide
(Davidson & Range, 1999; Nadeem et al., 2011), it is equally important they see the school psychologist as helpful resource for other student concerns. As stated before, school psychologists receive training and education regarding academic support, behavior, and special education services. Therefore, collaboration around these challenges that students face could be more effective if school professionals had a full understanding of each other’s training and expertise. If school professionals can collaborate to their best ability regarding student concerns, then there is a greater chance of supporting students effectively and fostering successful academic careers for students; this especially true for students at risk for suicide (Nadeem et al., 2011).

Overall, results suggest that preservice teachers in this sample do not seem to be aware of the school psychologist’s varied roles within the school, instead perceiving the primary role as one to help with students at-risk for suicide/mental health concerns. Because teachers have the most direct interaction with students compared to other school professionals, they are in an ideal position to identify warning signs of suicide (Davidson & Range, 1999) as well as other student concerns (e.g. need for behavior support, academic support, or special education referral). As professionals who often are first to hear of, or notice student concerns, it is crucial for the teacher (as well as the student) to know if and when to collaborate with their school psychologist to problem-solve around the student concern. In addition, results from this study suggest that participants identify the school psychologist’s main role to be working with students at risk for suicide until they interact with a school psychologist (e.g. through a school placement). After such interactions, pre-service teachers’ knowledge of the other roles of the school psychologist increases, and knowledge of involvement with students at risk for suicide does not
change. Logically, participants reported feeling more comfortable approaching their future school psychologist about working with students at risk for suicide compared to approaching the school psychologist about other student concerns. This is likely because they know the school psychologist has the knowledge to help them work with that student and perceive the school psychologist to be more helpful in that situation compared to other student concerns. While it is important for suicide prevention to have teachers identify the school psychologist as a first-point contact for students at risk, it is equally important that teachers understand the school psychologists’ other roles as well.

The results of this study suggest that providing teachers with a basic understanding of who school psychologists are and what they do in the school is important to helping preservice teachers understand how to use their future school psychologist as a resource. Research suggests this knowledge is important because communication and collaboration with other staff are important factors that increase teacher participation, and comfort with, suicide prevention in the schools (Nadeem et al., 2011). Knowing about the other roles school psychologists play in the schools may also enhance collaboration and communication pertaining to those concerns. It makes sense that the more preservice teachers know about the different ways that the school psychologist can help them, the more likely it is they will identify the school psychologist as a potentially helpful resource regarding a variety of student concerns. Additionally, collaboration between universities with teacher training programs and school psychology graduate programs can provide preservice school psychologists with an opportunity to gain insight on the content of teacher training programs and preservice teacher knowledge that can further enhance collaboration once in the field. This preservice
education for both teachers and school psychologists is important for enhancing collaboration between school psychologists and teachers in the school setting.

**Limitations**

This study has a number of limitations worth noting. First, the sample size was small and recruited from a convenience population of one university’s preservice teacher training program. Due to the uniqueness of the population, this may mean the results of the current study are not generalizable to the broader population of preservice teachers. Second, participant demographics such as race, gender, and age lacked diversity given that the majority of participants were female (84.5%), Caucasian (96.7%), and 21 years old or younger (50.8%). Additionally, the population of preservice teachers from which the current study sample was derived may be unique because of the opportunities offered within this particular teaching program. For example, special education undergraduate majors in this population often receive the opportunity to work closely with school psychology graduate students for a few weeks in an on-campus clinic that serves clients from the surrounding community. Through this clinic work, preservice special education teachers are exposed to the different areas of expertise in the school psychology discipline and can collaborate directly with school psychology graduate students. Teacher training programs vary greatly in the content taught and emphasized, as well as the opportunities provided to the preservice teachers within the program (U.S. Department of Education, 2009). As such, many students may not have opportunities to interact with school psychologists until their placements for student teaching in the schools. Thus, the current sample may be unique regarding their opportunities to interact with a school psychologist, which could have influenced their responses. Thus, the current sample’s
responses may not be an accurate reflection of pre-service teachers nationwide. A further limitation is the overall response rate for the current study. The low response rate raises the question of response bias and whether the small number of preservice teachers who did respond to the study were different in some way from the large number of preservice teachers who did not respond at all or who completed less than 50% of the survey. Together, these restrictions to the sample limit the generalizability of the results, making further research essential to understanding potential gaps in knowledge of preservice teachers about the roles of the school psychologist in serving student across a variety of problem areas.

Due to the lack of research focusing on knowledge of school psychologist roles, survey items were created for the purpose of this study. While some items were based on the School Psychology Perceptions Survey (Gabriel & Gilman, 2004), these items were modified to fit the current study. Because survey items were not replicated exactly from an existing measure, the reliability and validity of the items used in this study have not been formally established. This means that results need to be interpreted with caution, as survey items may not be accurately nor reliably representing participant knowledge about the school psychologist’s roles, comfort approaching their future school psychologist, or perceived helpfulness of the school psychologist regarding the different student concerns asked about in this study. Additionally, only one item per student concern category was used to assess participants’ perceived helpfulness of the school psychologist and their comfort level approaching their future school psychologist. This gives us a less reliable idea of participants’ true perceived helpfulness of, and comfort with, approaching their future school psychologist.
Conclusions

Ensuring that preservice teachers receive exposure to, or training on, the role of the school psychologist in the school setting is important because research suggests this knowledge may enhance collaboration and increases teacher participation in suicide prevention (Nadeem et al., 2011), as well as in other areas of student concern (Rennie Center Education Research & Policy, 2014). Teachers are the school professionals who interact the most with students, are in a good position for identifying students who may be at risk for suicide, and often are the first to hear of or notice warning signs for student suicidality (Davidson & Range, 1999). For these reasons, it would likely be beneficial for teachers to learn about the collaborative opportunities available with the school psychologist to help serve students of concern. Proactively learning how to support students at risk for suicide will be more effective than figuring out how to support these students after at risk status is confirmed.

There is still much research to be done regarding the knowledge preservice teachers have about working with the school psychologist to support students at risk for suicide. Due to the differences in teacher training programs, and types of teacher training programs, across the United States, it is even more important to understand the school psychology related content, if any, that is being disseminated to preservice teachers. While the current study’s results suggest that preservice teachers, regardless of specialty, report more knowledge about the school psychologist’s roles after having worked with or being exposed to a school psychologist, there remains a need to examine what information preservice teachers receive about the roles of the school psychologist before entering the field through a student placement or their first job. If future research can
identify areas where there is a gap between preservice teacher training and preservice school psychologist training that could hinder collaboration among these professionals in the schools, then these gaps could be addressed through changes in university programming for teachers and school psychologists or through informational sessions/trainings once in the field.

The results of this study will hopefully inspire further research exploring preservice teacher knowledge of the school psychologist as a resource on a larger scale and guide efforts to educate preservice teachers on using their future school psychologist as a resource when faced with certain student concerns. If future studies find similar results, then we can begin to understand how to enhance collaboration between school psychologists and teachers in the field. Effective collaboration between school professionals is particularly important when working with students who are at risk for suicide to support them in the most effective way possible. Understanding what preservice teachers know about collaborating with their future school psychologist can provide insight for others in the education field regarding how to enhance collaboration among professionals. Effective collaboration among school professionals helps us meet our ultimate goal of effectively supporting every student in our schools.
References


doi:10.1080/15325020902928625


doi:10.1002/da.22114


Survey Items

Demographics

Q1: What gender do you identify with?
   Male ___  Female ___  Gender Fluid ___  Transgender ___  Prefer not to answer ___  
   Other: ___

Q2: What is your age?
   19 or younger ___  20 ___  21 ___  22 ___  23 or older ___

Q3: What is your race/ethnicity?
   Caucasian__  Latinx__  African American__  Native American__  Asian/Pacific Islander__  Hmong__  Hispanic__  Other: ___

Q4: In which year of school are you?
   First/Second ___  Third ___  Fourth ___  Fifth or more ___

Q5: What is your major?
   Regular Education Major ___  Special Education Major ___  
   Other: ___

Block 1: At Risk for Suicide Questions

Q6: Who would you contact first with concerns about a student who may be at-risk for suicide?
   Principal___  Another teacher___  School Counselor___  Guidance Counselor___  
   School Psychologist___  Nurse___  Other: ___

Q7: Given your current knowledge about school psychology, rate how helpful you think a school psychologist would be with assisting you in working with a student at-risk for suicide (10-point Likert Scale):
   1-Not helpful at all ------------ 5-Neutral/Unsure------------------- 10-Very Helpful

Q8: How comfortable would you be approaching the school psychologist at your future school to ask for help with a student you are concerned about being at risk for suicide? (10-point Likert scale)
   1-Not at all comfortable------- 5-Neutral/Unsure------------------- 10-Very Comfortable

Q9: Based on your knowledge, how likely is it that a school psychologist would engage in the roles below when working with a student who is at risk for suicide? Rate the likeliness on a scale of 0 = not likely at all to 10 = very likely:
   - Consultation (provide knowledge and strategies for working with student)
     0-Not at all likely ------------------------------- 10-Very Likely
   - Complete a suicide risk assessment
     0-Not at all likely ------------------------------- 10-Very Likely
• Refer student and family to community resources
  0-Not at all likely ------------------------------- 10-Very Likely
• Provide in-school counseling/support for students
  0-Not at all likely ------------------------------- 10-Very Likely
• Work with teacher to manage concerns
  0-Not at all likely ------------------------------- 10-Very Likely
• Do check-ins with student
  0-Not at all likely ------------------------------- 10-Very Likely
• Planning for when student returns to school after hospitalization
  0-Not at all likely ------------------------------- 10-Very Likely
• Supporting students and staff following a student death by suicide
  0-Not at all likely ------------------------------- 10-Very Likely

Block 2: Referral for Special Education Services Questions

Q10: Who would you contact first with concerns about a student who may need to be referred for special education services?

   Principal___   Another teacher___   School Counselor___   Guidance Counselor___
   School Psychologist___   Nurse___   Other:____

Q11: Given your current knowledge about school psychology, rate how helpful you think a school psychologist would be with assisting you in working with a student who may need to be referred for special education services: (10-point Likert Scale)

   1-Not helpful at all ---------------- 5-Neutral/Unsure-------- 10-Very Helpful

Q12: How comfortable would you be approaching the school psychologist at your future school to ask for help with a student you think may need to be referred for special education? (10-point Likert Scale)

   1-Not at all comfortable---------5- Neutral/Unsure-------- 10-Very Comfortable

Q13: Based on your knowledge, rate how likely it is that the school psychologist would engage in the following roles when working with a student who may be referred for special education services on a scale of 0 = not likely at all to 10 = very likely:

   • Consultation (provide knowledge and strategies for working with student)
     0-Not at all likely ------------------------------- 10-Very Likely
   • Complete diagnostic assessments with student to gather more information
     0-Not at all likely ------------------------------- 10-Very Likely
   • Collect data (via file reviews, interviews, checklists, etc.) to inform decisions
     0-Not at all likely ------------------------------- 10-Very Likely
   • Provide information to parents and regular education teachers about what supports the school can or cannot provide
     0-Not at all likely ------------------------------- 10-Very Likely
   • Complete special education referral paperwork
     0-Not at all likely ------------------------------- 10-Very Likely

Block 3: Extra Academic Support Questions
Q14: Who would you contact first with concerns about a student who may need extra classroom supports academically?

Principal___ Another teacher___ School Counselor___ Guidance Counselor___
School Psychologist___ Nurse___ Other:____

Q15: Given your current knowledge about school psychology, rate how helpful you think a school psychologist would be with assisting you in working with a student who need extra classroom supports academically? (10-point Likert Scale)

1-Not helpful at all -------------- 5-Neutral/Unsure--------------- 10-Very Helpful

Q16: How comfortable would you be approaching the school psychologist at your future school to ask for help with a student you think may need extra classroom supports academically? (10-point Likert Scale)

1-Not at all comfortable------------- 5-Neutral/Unsure--------------- 10-Very Comfortable

Q17: Based on your knowledge, how likely is it for the school psychologist to engage in the following roles when working with students who may need extra support in the classroom academically? (0 = not likely at all to 10 = very likely):

- Consultation (provide knowledge and strategies for working with student)
  0-Not at all likely -------------------------- 10-Very Likely

- Complete diagnostic assessments of academic and intellectual abilities that provide more information
  0-Not at all likely -------------------------- 10-Very Likely

- Facilitate the special education referral process (if needed)
  0-Not at all likely -------------------------- 10-Very Likely

- Provide intervention options to further support students in the special education setting
  0-Not at all likely -------------------------- 10-Very Likely

Block 4: Challenging Behavior Questions

Q18: Who would you contact first with concerns about a student who is displaying challenging behaviors in the classroom?

Principal___ Another teacher___ School Counselor___ Guidance Counselor___
School Psychologist___ Nurse___ Other:____

Q19: Given your current knowledge about school psychology, rate how helpful you think a school psychologist would be with assisting you in working with a student exhibiting challenging behaviors in the classroom: (10-point Likert Scale)

1-Not helpful at all -------------- 5-Neutral/Unsure--------------- 10-Very Helpful

Q20: How comfortable would you be approaching the school psychologist at your future school to ask for help with a student who is struggling behaviorally? (10-point Likert Scale)

1-Not at all comfortable------------- 5-Neutral/Unsure--------------- 10-Very Comfortable
Q21: Based on your knowledge, how likely is it for a school psychologist to have the following roles when working with students who exhibit challenging behaviors in the classroom? (*0 = not likely at all to 10 = very likely*):

- Consultation (provide knowledge and strategies for working with student)
  - 0-Not at all likely ------------------------------- 10-Very Likely
- Conduct a functional behavior analysis, observe the student in the classroom, or interview teachers & other staff for more information
  - 0-Not at all likely ------------------------------- 10-Very Likely
- Assess student to determine whether or not they qualify for special education services (if needed)
  - 0-Not at all likely ------------------------------- 10-Very Likely
- Refer student and family to community resources or other specialized faculty in the school (like a behavior specialist)
  - 0-Not at all likely ------------------------------- 10-Very Likely

Q22: In your educational experience so far, have you had the opportunity to work with a school psychologist?

Yes _____     No____    Not sure ____

Q23: Do you personally know a school psychologist? (E.g. family, friend, acquaintance, from experience in schools?)

Yes _____     No____    Not sure ____