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# Increasing Referrals to School Counselors by Integrating an Evidence-Based Program for Educators Identifying Adolescents at Risk for Suicide in a Rural High School

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# INCREASING REFERRALS TO SCHOOL COUNSELORS BY INTEGRATING AN EVIDENCE-BASED PROGRAM FOR EDUCATORS IDENTIFYING ADOLESCENTS AT RISK FOR SUICIDE IN A RURAL HIGH SCHOOL

A DNP Project Submitted to the Graduate Faculty of Jacksonville State University in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice

By

# WENDY DAWN HOLLOWAY

Jacksonville, Alabama

June 9, 2021

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Wendy Dawn Holloway June 9, 2021

# ABSTRACT

*Background:* Addressing suicide in America's youth is imperative. Teachers play an essential role in identifying and intervening with adolescents experiencing psychological distress leading to suicide. Teachers and staff lack professional development addressing the identification of students in psychological distress.

*Purpose:* This project aimed to increase referrals to school counselors by integrating an evidence-based program for educators identifying adolescents at risk for suicide in a rural high school.

*Design Method*: This was a quantitative quality improvement project with a pre-/post-test design. Additionally, referrals to the school guidance counselors before implementing the program and after the completion of the program were analyzed.

*Conclusion:* There was a significant increase in teachers' and staff members' confidence in their ability to recognize when a student was exhibiting signs of psychological distress, and an increase in their ability to talk to a student in psychological distress and help those students connect with the school guidance counselors.

*Implications for Nursing*: This DNP project showed that implementing an evidence-based professional development program helped build teachers' and staff's skills that support early identification and intervention with students experiencing psychological distress, leading to suicide.

**Keywords:** Suicide, adolescents, Kognito, child, program, teacher, prevention, school, school-based, gatekeeper, evidence-based, and strategy

iv

#### ACKNOWLEDGMENT

I have received a great deal of support and assistance throughout my journey in the DNP program. This work is dedicated to my loving husband, Blake, and my four children Audrey, Ethan, Owen, and Tidus, who all have been a constant source of support and encouragement during the challenges of juggling school and life. I know you have heard "I'm going to do my homework" more times than you can count. I am truly thankful for having you all in my life and for the endless pots of coffee.

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based simulations utilized in my project, and without your cooperation, the data gathered for this work could not have been possible.

I would like to thank my NACC family. It is an honor and privilege to work with a group of people who are incredibly loving and supportive of one another. It is a blessing to call you my work family. Most importantly, I want to thank Jesus Christ, who is my Lord and Savior, for your guidance, strength, knowledge, and countless blessings that helped me accomplish this endeavor.

Abstract iv
Introduction1
Background4
Problem Statement
Organizational Description of Project Site6
Review of the Literature7
Evidence-Based Practice: Verification of Chosen Option12
Theoretical Framework/Evidence-Based Practice Model12
Goals, Objectives & Expected Outcomes14
Project Design
Project Site and Population
Setting Facilitators and Barriers
Implementation Plan/Procedures
Measurement Instrument(s)
Data Collection Procedure
Data Analysis21
Results
Discussion
Cost-Benefit Analysis/Budget
Timeline
Ethical Considerations/Protection of Human Subjects
Conclusion

# TABLE OF CONTENTS

References	30
Appendix A	
Appendix B	
Appendix C	
Appendix D	40
Appendix E	41
Appendix F	65
Appendix G	67
Appendix H	68
Appendix I.	69

Increasing Referrals to School Counselors by Integrating an Evidence-Based Program for Educators Identifying Adolescents at Risk for Suicide in a Rural High School

#### Introduction

Addressing the high rates of suicide in America's youth is imperative. In 2017, there were an estimated 1.4 million suicide attempts in the United States (America's Health Rankings, 2020). Suicide is the second leading cause of death among 10- to 19-years old in the United States, with suicide rates nearly tripling from 2007 to 2017 (Curtin & Heron, 2019). Furthermore, according to the Youth Risk Behavior Surveillance Summaries (YRBSS) (2019), 17.2% of high school students seriously considered suicide in the past 12 months, 13.6% of students nationwide had made a plan on how they would attempt suicide, and 7.4% of students attempted suicide. Every year 2,877 people ages 13 to 19 die by suicide, one in six students have seriously considered attempting suicide, and one in 13 high school students have attempted suicide one or more times (Centers for Disease Control and Prevention [CDC], 2018).

According to the Suicide Prevention Resource Center (2019), suicide involves the combination of multiple risk factors such as stressful life circumstances, family history of child maltreatment, history of mental disorders, isolation, physical illness, and unwillingness to seek help because of the stigma attached to mental health and suicidal thought. Most recently the lockdowns nationwide due to the COVID-19 pandemic have dramatically increased the number of adolescent mental health emergency department (ED) visits. The number of adolescent mental health ED visits increased 69% from March 29-April 25, 2020 compared to the corresponding period in 2019. The number of adolescent mental health ED visits increased 44% from mid-March-October 2020

compared to the corresponding period in 2019. The number of deaths by suicide among adolescents in 2020 have not been reported at the time of this manuscript's submission. These risk factors can be the tipping point and trigger suicidal behaviors in adolescents. The economic impact of suicide is immense, with suicide and suicide attempts costing the United States almost \$70 billion dollars per lifetime in medical expense and loss of work income (CDC, 2020; Leeb, Bitsko, Radhakrishnan, Martinez, & Njai, 2020).

Suicide was the 10<sup>th</sup> leading cause of death in Alabama, with 823 people lost to suicide in 2018; the rate of suicide in Alabama was 16.8 per 100,000 population. In 2016, the number of deaths by suicide in DeKalb County, Alabama, was 10, all of Caucasian race, and seven were males. By 2017, the number had doubled to 20 suicides reported in Dekalb County, all of Caucasian race, and 18 were males (Alabama Department of Public Health [ADPH], 2016, 2017, 2020). In September 2019, the DeKalb County Sheriff's Office released a statement notifying the community there had been seven suicide attempts and five completions in 24 hours (DeKalb County Sheriff's Office, 2019).

Adolescent suicide has had a vast impact on the health of others, the community, and the economy. According to Survivors of Suicide Loss Task Force (2016) an estimated 115 people were exposed to a single suicide, with one in five reporting that the experience had a devastating impact or caused a significant life disruption. Family members may be in shock, grief, guilt, depression, or even complete denial (CDC, 2020). Family members grieving suicide tend to report poorer general health and physical illness, including cardiovascular disease, chronic obstructive pulmonary disease, hypertension, and diabetes, as well as mental health issues such as depression, anxiety, and extreme sadness (Spillane, Matvienko-Sikar, Larkin, Corcoran, & Arensman, 2018). The impact of adolescent suicide may reach people in the community such as teachers, staff, clergy, and others who support the family as well as law enforcement workers and first responders to the scene of a suicide. Teachers and clergy members feel a sense of guilt for not recognizing the warning signs of suicide, and if they were close to the adolescent, they might go through the same depression and grief as the family (Survivors of Suicide Loss Task Force, 2015). First responders and law enforcement are usually the first on the scene of a suicide and may provide emotional and physical support. Over time, this can lead to depression, stress and posttraumatic stress symptoms, suicidal ideation, and substance abuse (Substance Abuse and Mental Health Services Administration [SAMHSA], 2018).

Teachers, school counselors, and special education teachers are in a unique position to recognize behaviors associated with mental health issues in the classroom. Unfortunately, many times these behaviors are not recognized by school personnel who have a difficult time understanding the signs that may be observed in adolescents at risk of suicide and depression. They are in constant contact with children, providing a safe environment, and are the best professionals to recognize troubling behaviors in their students. However, many teachers do not believe they have been trained appropriately to identify and intervene with students experiencing psychological distress (Bradley & Kendall, 2019). Training teachers and staff using virtual simulation have proven to help provide professional development in identifying, supporting, and referring at-risk students without the potential for harm (Bradley & Kendall, 2019; Marsh, 2016).

# Background

The DNP project was implemented at a rural high school in northeast Alabama. This was a public school for grades Pre-K through 12 with no feeder schools. The enrollment number was around 1,200 students, with a little more than half the number being elementary students. The students' ethnicity was approximately 75% Caucasian, with the remaining groups of American Indian, Hispanic, African American, and Asian, and this has remained relatively consistent from year-to-year. This was a Title 1 school that received federal funds because of the large concentrations of low-income students, where around 60% of students received free or reduced lunches in the Child Nutrition Program. The school employed 125 teachers and staff members, including three administrators, two librarians, three guidance counselors, instructional resource personnel, and a school resource officer (Plainview High School [PHS], 2020).

Suicide is the 10<sup>th</sup> leading cause of death for all ages and the second leading cause of death for youth and young adults, with one person dying every 11 minutes in the United States (CDC, 2020). One million four hundred thousand people attempted suicide in the United States in 2018 (CDC, 2020). Alabama is a rural state with social isolation, poverty, and a lack of mental health services, with few people qualifying for mental health services under Medicaid (Freeman, 2018). The rate of suicide in Alabama in 2018 was 16.8 per 100,000 population, with Alabama showing a pattern of higher rates than the United States national average since 1990. In 2018, 116 youth died by suicide in Alabama, with the rate of suicide being highest among Caucasian, non-Hispanic males (ADPH, 2020).

According to the Alabama 2019 High School YRBSS, 493 ninth-grade students in

Alabama had seriously considered attempting suicide in the past 12 months before the survey as well as 591 tenth graders, 509 eleventh graders, and 410 twelfth graders. Of those students, 1,011 were Caucasian, 693 were African American, 148 Hispanic, 30 were Asian, and 65 were of multiple races. The number of heterosexual students in the Alabama 2019 YRBSS was 1,577, and 542 students considered themselves gay, lesbian, or bisexual. The number of students who attempted suicide in the 2019 survey was 1,685 grades nine through 12, and all but one of those students had to be treated by a doctor or nurse for injuries due to their attempt (CDC, 2019, 2020).

Teachers play an essential role in identifying students at risk for mental health issues; however, studies have found that teachers may not know how to identify risk factors of suicide or how to engage youth in a conversation about suicide risk (Marsh, 2016; Robinson-Link et al., 2019). There has been an increased recognition that adolescents are experiencing mental health issues. Despite this, school teachers and staff members have had difficulty identifying those students before there was a significant incident. Teachers do not feel that they have been adequately trained to identify students with psychological problems or refer at-risk students (Bradley & Kendall, 2019; Marsh, 2016).

# **Problem Statement**

Suicide is the 10<sup>th</sup> leading cause of death for all ages and the second leading cause of death for youth and young adults, with one person dying every 11 minutes in the United States. The rate of suicide in Alabama in 2018 was 16.8 per 100,000 population, with Alabama showing a pattern of higher rates than the United States national average since 1990 (ADPH, 2020; CDC, 2020). Since teachers spend most of the day with their

students, they may be the best professionals to recognize and intervene with adolescents at risk for psychological problems that could lead to suicide; however, teachers and staff do not feel they have been adequately trained to identify or refer at-risk students (Bradley & Kendall, 2019).

Literature to support this problem was collected based upon the following PICOT question: (P) For school teachers, and staff in a rural high school (I) does implementing an evidence-based program identifying adolescents at risk for suicide (C) compared to no evidence-based program (O) increase the number of referrals to school guidance counselors (T) in three months?

This DNP project's approach was based on the assumption that implementing a suicide awareness professional development program that aimed to help educators and staff identify and intervene early with students experiencing psychological distress would increase referrals to the school guidance counselors.

#### **Organizational Description of Project Site**

The problem with suicide in Alabama is that Alabama is a rural state where there is social isolation, poverty, and a lack of mental health services where few people qualify for mental health services under Medicaid (Freeman, 2018). The DNP project was implemented in a rural area in northeast Alabama that saw a 50% increase in suicides over the past three years and most recently had seven suicide attempts and five completions in a 24-hour time period (Dekalb County Sheriff's Office, 2019). This project will help build skills in teachers and staff members that support early identification and intervention with students experiencing psychological distress, leading to suicide.

#### **Review of the Literature**

The researcher relied on several search engines, including ERIC, Medline, EBSCO HOST, PubMed, Cochrane, APA PsychINFO, APA PsychArticles, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), and Academic Search Premier, to gather pertinent evidence-based research data for the literature and full-text search, and peer-reviewed articles. The following keywords proved useful in the search for empirical literature on evidence-based programs identifying adolescents at risk for suicide: suicide, adolescent, child, program, teacher, prevention, school, school-based, gatekeeper, evidence-based, and strategy. The literature review identified two systematic reviews, one quantitative study, one cluster-randomized controlled trial, one longitudinal study, one cross-sectional study, one scoping review, and a literature review.

#### **Suicide Among Youth**

Suicide is a leading cause of death among youth, with the sharpest increase in the number of suicide deaths occurring between early adolescence and young adulthood. Research showed key patterns and gaps in knowledge regarding epidemiology, etiology, and treatment (Cha et al., 2018). In 2017, the prevalence rates among youth for suicidal ideations were in a range of 19.8% and 24%, and suicide death accounted for 8.5% of all deaths among adolescents and young adults worldwide (CDC, 2018; Cha et al., 2018). Researchers discovered a wide variation of suicidal thoughts among youths from various countries and sociodemographic populations, and the majority of risk factors stemmed from environmental and psychological influences (Cha et al., 2018).

Research has identified three environmental risk factors of suicidal thoughts and behaviors among youth: childhood maltreatment, bullying, and peer and media influence (Cha et al., 2018). Childhood maltreatment and bullying had the strongest line of evidence; peer and media influence demonstrated mixed evidence of suicide clusters. The different types of childhood mistreatment leading up to suicidal ideation included sexual, physical, and emotional abuse. Suicidal ideations and attempts from bullying included repeated, disturbing behavior, verbal abuse, and social exclusion, as well as cyberbullying through social media. Peer and media influence has been shown to cause suicidal ideations, and studies have validated that having a friend who attempted or died by suicide predicts future suicide attempts in adolescents (Cha et al., 2018; Mars, Heron, Klonsky, Moran, O'Connor, & Tilling, 2019).

Three psychological risk factors of suicidal thoughts and behaviors among youth discussed were effective processes, cognitive processes, and social processes (Cha et al., 2018). Evidence supporting negative affected-related processes ranged from worthlessness, hopelessness, and low self-esteem as risk factors for suicidal thoughts and behaviors in youth (Reid-Russell, Miller, Cvencek, Meltzoff, & McLaughlin, 2021). Impulsivity and impulsive aggression are considered prospective risk factors for suicidal ideation and attempt (Cha et al., 2018). Interpersonal connectedness, such as loneliness, was found to be the most common social process assessed as a risk factor for suicidal ideation and attempt. Research suggested social communication and response processes were critical to maintaining interpersonal relationships (Cha et al., 2018).

Demographic patterns have shown distinguishing characteristics among age, sex, race, and sexual orientation, with adolescent girls being more likely to have experienced suicidal ideations and suicide attempts than boys, whereas boys were more likely to complete suicide. Older adolescents were more likely to die by suicide than younger

adolescents. Indigenous youth had a higher risk of suicide, and lesbians, gay, bisexual, transgender, and questioning (LGBTQ) have shown a higher prevalence of suicidal ideation and attempt compared to heterosexual youth (CDC, 2018; Cha et al., 2018).

#### **Adolescents and School**

School is a critical environment where children have first contact with the outside world spending seven to eight hours daily there, 10 months out of a year. Research suggested students attending impoverished schools may be confronted with higher levels of violence, drug use, bullying, and crime, with elevated stress levels worsening mental health outcomes (Badr, 2017). Youth at impoverished schools may have lower levels of trust and social connectedness between students, their peers, and teachers, leading to feelings of isolation and a sense of meaninglessness, putting the students at a greater risk of mental health problems such as suicide (Badr, 2017; Fang, 2018).

Badr (2017) aimed to "determine the prevalence of suicidal behaviors and identify psychosocial correlates of suicided behavior" (p. 168). A two-stage cluster sample design was used targeting 2,672 students in Kuwait by employing the Global School-Based Student Health Survey (GSHS) designed by the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC). "Multivariate analysis revealed that girls, smoking, physical violence, feeling lonely, exposure to bullying at school, and having nonempathetic parents were significant correlates of the experience of suicidal behaviors among adolescents" (p. 168). The conclusion was that the prevalence of suicidal behaviors was alarmingly high and suggested school-based mental health programs were necessary to reduce life-threatening behaviors (Badr, 2017).

#### The Role of Educators

School staff are commonly among the first adults to be confronted with suicidality and nonsuicidal self-injury (NNSI). Previous studies suggested educators have a lack of knowledge and confidence in dealing with NNSI and suicidal behaviors (Badr, 2017; Bradley & Kendall, 2019; Groschwitz, Munz, Straub, Bohnacker, & Plener, 2017). There was discussion that the frequency of self-injurious behaviors, with 81% to 99% of school staff from the United States, Australia, and Canada reported being in contact with a student presenting with NSSI or suicidality at least once in their careers. As many as 80% of teachers voiced their need for increased knowledge and confidence regarding dealing with these students. Many teachers reported never having received any education regarding NSSI and suicidality, causing worry since teachers are among the first to notice NSSI in a student. Research suggested these "numbers call for school-based interventions which aim to modify attitudes toward students with NSSI and increase confidence and knowledge in school staff" (Groschwitz et al., 2017, p. 189).

Professional development programs and interactive simulations, such as those designed by Kognito, have proven to help teachers and staff identify and intervene with adolescents at risk for suicide. For example, an evaluation was conducted of 16 two-day professional development programs across different cities in Germany on NSSI and suicidality in adolescence for teachers, school social workers, and school psychologists. There were pre-, post-, and six-month follow-up assessments concerning attitudes, confidence in own skills, perceived knowledge, and knowledge on NSSI and suicidality. Two hundred sixty-seven school staff members took part in the professional development programs where they completed a pre-test prior to the program and post-assessment upon completion of the program, and of those participants, 49 completed a 6-month follow-up online assessment. Researchers concluded a two-day professional development program seemed to effectively change knowledge and confidence in school staff regarding NSSI and suicidality (Groschwitz et al., 2017).

Kognito Interactive designed computer simulations to effectively train teachers and staff personnel in successful identification and referral practices using virtual teachers and students. The teachers and staff members engage in hands-on practice leading conversations with virtual, fully animated, and emotionally responsive students that are scientifically designed to embody specific personalities, attitudes, and medical/behavioral health conditions (Kognito, 2020). A study conducted by Bradley and Kendall (2019) reported significant improvement in teacher confidence and competence in approaching and referring at-risk students to mental health services, and results from the study suggested virtual simulations were an effective training tool for educators in the area of the identification and referral of at-risk students.

In summary, research showed an increasing number of suicides among adolescents and young adults, and there were key patterns and gaps in knowledge regarding epidemiology, etiology, and treatment. Discussions were conducted regarding schools being an important environment where children have the first point of contact with the outside world and revealed girls, smoking, physical violence, feeling lonely, exposure to bullying at school, and having non-empathetic parents were significant correlates of adolescents experiencing suicidal behaviors (Badr, 2017; Cha et al., 2018). Research identified school staff as the first adults to be confronted with suicidality and NSSI, and studies suggested educators had a lack of knowledge and confidence in dealing

with NSSI and suicidal behaviors (Badr, 2017). Studies suggested using virtual simulations, such as programs by Kognito, in professional development to help build skills in teachers and staff to identify and intervene early with students experiencing psychological distress, which could lead to suicide (Bradley & Kendall, 2019; Groschwitz et al., 2017). It is necessary to implement evidence-based school-based programs to increase school staff and educators' knowledge regarding NSSI and recognizing adolescents at risk for suicide.

#### **Evidence-Based Practice: Verification of Chosen Option**

A literature review demonstrated the need for an evidence-based program to help educators and staff identify and intervene early with students experiencing psychological distress. According to research, evidence-based programs and interactive simulations have proven to help teachers and staff identify and intervene with adolescents at risk for suicide (Groschwitz et al., 2017). An evidence-based quality improvement program was offered at a rural high school to implement best clinical practices for suicide intervention and measure the relationship between a suicide awareness program and referrals. This quality improvement program provided education on the importance of identifying adolescents at risk for suicide and intervening early with students experiencing psychological distress. The effectiveness of the evidence-based program was evaluated by comparing a pre-and post-test survey, and the comparison of the number of referrals to the school guidance counselor before and after implementing the program.

#### **Theoretical Framework/Evidence-Based Practice Model**

The theoretical framework that guided the project was Ida Jean Orlando's Nursing Process Theory. This theory was developed to focus on the unconscious and conscious mental and emotional forces that determine personality and motivation between the nurse and patient, with the nurse responding to the patient's future needs. Orlando's nursing theory stressed the reciprocal relationship between patient and nurse, and emphasized the importance of nurse-patient interaction. This theory helped educators and school staff members recognize adolescents at risk for suicide (Alligood, 2018; Orlando, 2016).

This project's decision-making was guided by components of Orlando's Nursing Process theory and included five interrelated concepts: professional nursing function, patient's presenting behavior, the immediate reaction by the nurse, deliberative nursing process, and improvement. Orlando conceptualized the nurse's unique function as finding out and meeting the patient's immediate needs for help where the patient was the focal point of the nurse's function (Alligood, 2015).

Orlando's original work suggested that the nurse and client's verbal and nonverbal interactions helped the nurse understand and plan for a specific situation (Orlando, 1961). The patient's presenting behavior may not have been reliable for determining the help needed; however, the presenting behavior may have been a plea for help. The nurse-patient situation was a dynamic process where a patient's behavior stimulated the nurse's immediate reaction, and became the starting point of the assessment (Alligood, 2015).

The nurse's immediate reaction may differ for each situation due to the nurse's individual thoughts or feelings, and evoke perceptions that the nurse used to assess the

patient's behavior. The nurse might display a unique reaction because of past experiences and knowledge combined with understanding the current situation. The nurse must be aware of his or her perceptions, not assuming they are correct until a thorough assessment of the patient and situation has been completed (Alligood, 2015).

Orlando discussed the importance of involving the patient in decisions to ensure a deliberative process of inquiring was utilized to prevent automatic responses, causing the care of the patient to be ineffective, even if it was the correct action to take (Orlando, 1961). The resolution component of Orlando's framework focused on whether the patient's verbal and nonverbal behavior had changed with the nurse reevaluating the process until there was improvement (Alligood, 2015).

According to Orlando (1961), persons became patients who required nursing care when they had needs for help that could not be met independently, and patients experienced distress or feelings of helplessness as the result of unmet needs. Orlando's theory was used as a visual representation of nursing faculty members' experiences providing support to psychologically distressed students. Orlando's Nursing Process Theory guided the project of integrating an evidence-based program for educators identifying adolescents at risk for suicide in a rural high school. The theory focused on the importance of a thorough assessment of the student's immediate needs, an equal relationship between the student and educator, treating the student as a whole, and successfully assisting the student to return to his or her optimal state of well-being (Alligood, 2015; Orlando, 1961).

#### **Goals, Objectives, and Expected Outcomes**

School educators and staff members are in constant contact with students and are well-positioned to observe students' behavior and act when they suspect self-harm (Suicide Prevention Resource Center, 2019). The purpose of this project was to increase referrals to school counselors by integrating an evidence-based program for educators identifying adolescents at risk for suicide in a rural high school.

The objectives of this DNP project were to (a) increase 75 percent of educators' and staff members' knowledge of the warning signs for suicide, and how to connect students in crisis with assistance and care; (b) integrate school-based suicide prevention into the values, culture, leadership, and work of the local school system with a goal to support suicide prevention activities; (c) encourage school-based settings to implement a suicide awareness program, and provide yearly education that promotes wellness and prevents suicide and related behaviors; and (d) instruct educators and staff members at a rural high school on how to intervene to reduce suicidal thoughts and behaviors in adolescents with suicide risk. The DNP project's primary objectives were to implement a suicide awareness program in a local school system educating teachers and staff how to identify adolescents at risk for suicide, and refer those students to the school counselor, therefore, increasing the number of adolescent students referred to the counselor.

## **Project Design**

The methodology chosen for this DNP project was based on the assumption that implementing a suicide awareness professional development program aimed to help educators and staff identify and intervene early with students experiencing psychological

distress would increase referrals to school guidance counselors. This was a quantitative quality improvement project. This DNP evidence-based quality improvement project's primary purpose was to implement the best clinical practices for suicide intervention in a rural high school and measure the relationship between a suicide awareness program and referrals.

Participants voluntarily enrolled in the virtual professional development by Kognito. Kognito was the evidence-based program that was used for the professional development project. Kognito offered participants a virtual environment where they engaged in role-play conversations with emotionally responsive virtual humans. Through practice and receiving personalized feedback, participants learned and assessed their competency to lead similar conversations in real life (Kognito, 2020). Once enrolled, the participant completed the two-hour program over four weeks. A pre-test and post-test designed by Kognito were collected on every participant. The number of referrals to school guidance counselors was recorded before and after implementing the program.

#### **Project Site and Population**

The DNP project occurred in a rural high school that served students in a small city in the southeastern United States. According to the Census Bureau's Zip Code Tabulation Areas (ZCTFAs), the community had a population of approximately 21,000 people, including the dense rural area within a 10-mile radius of the city. The median household income in 2018 was \$35,449, and approximately 25.5% of the population were considered persons in poverty. The city had three manufacturing facilities, several other business enterprises, including two utility cooperatives, a city library, two large public venues in the area, and was 10 miles from a local community college

(RainsvilleAlabama.com, 2019; United States Census Bureau, 2020). The city was home to a youth center that offered various services for children and adolescents, including but not limited to psychiatric and psychological evaluations, diagnosis, forensic evaluations, medication management, substance assessments, and counseling (SAM Foundation, 2020).

Participants in the program were teachers and staff members of the rural high school. The school was comprised of 1,239 students enrolled from pre-kindergarten to 12<sup>th</sup> grade and 125 staff members, including 46 teachers kindergarten through sixth grade, 33 teachers seventh through 12<sup>th</sup> grade, three administrators, three counselors, two librarians, instructional resources personnel and support workers. The teachers ranged in age from 24 years of age to 65 years of age. According to the National Center for Education Statistics [NCES] (2020), the student-to-teacher ratio was 17:1. The percentage of student enrollment by ethnicity was approximately 75% Caucasian, with the remaining groups being of American Indian, Hispanic, African American, and Asian descent. This was a Title 1 School, with around 60% of the population receiving free or reduced lunches in the Child Nutrition Program (Plainview High School, 2020).

Participation in the DNP project implementation was voluntary. The administration agreed to give teachers and staff who participated in the program professional development hours. A letter was sent out via email to each potential participant explaining the importance of recognizing students at risk for suicide and referring them to the guidance counselor for additional resources. This letter served as an advertisement for the project and allowed teachers and staff to check their availability with their work schedules. This letter was sent by work email to all participants

approximately one month before implementing the program. The week of implementation, an email was sent to all faculty and staff with instructions attached, in the form of a flyer, showing the steps to register for their Kognito account. The registration process entailed creating a new account with the individuals' first and last name, email address, password, and enrollment key.

Stakeholders in this project were teachers and staff members of the rural high school consisting of the high school principal, elementary school principal, one assistant principal, one school nurse, three guidance counselors, 46 kindergartens through sixthgrade teachers, 33 seventh through 12<sup>th</sup>-grade teachers, and 19 support staff personnel. Each of these stakeholders acted in a participatory role by participating in the mental health professional development program. Other stakeholders were students, the community, and House Majority Leader Nathaniel Ledbetter and Senator Steve Livingston who provided funding for the Kognito licenses.

#### **Setting Facilitators and Barriers**

The DNP project required operating systems/dates for the teacher and staff members to complete the Kognito simulation. The school provided the computers. Another resource needed was time for teachers and staff to complete the program at the school. The high school principal allowed teachers and staff four weeks starting November 9<sup>th</sup> through December 9<sup>th</sup> to complete the program. Funding was needed to purchase the Kognito licenses for teachers and staff and was awarded from House Majority Leader Ledbetter and Senator Steve Livingston. Facilitators of the project included the DNP student and the high school principal. The high school principal agreed

to provide 2 hours of professional development time to each teacher and staff member who completed the evidence-based program.

Constraints and barriers to implementing the project included a limited timeframe, teacher and staff workload, the ability to use the technology, budget, and teachers and staff's willingness to participate. The timeframe was limited to four weeks for project implementation. School closed early for Winter Break due to COVID-19. This was a barrier because of teachers and staff not being on campus to complete the program. Upon return, the high school principal allowed an additional two-week time frame for teachers and staff to complete the Kognito program during regular work hours. Teachers and staff may not have been willing to participate due to a heavy workload or limited free time. The Kognito license was \$32 per person. This would have been a barrier without the granted funding.

#### **Implementation Plan/Procedures**

The participants' initial contact was a letter drafted by the DNP student and the high school principal sent by email to encourage participation in the DNP project and inform the teachers and staff on the importance of early identification and intervention with students experiencing psychological distress, which could lead to suicide. The letter notified teachers and staff they would earn professional development hours upon completion. This letter was sent one month before the project was implemented. The school administration provided the email address of teachers and staff members to the DNP student. An attachment was sent in an email that had directions on how to create a Kognito account, and the email included the product key to begin the simulation. There

was a pre-test and post-test embedded in the simulation. It took the participants approximately one hour to complete the Kognito virtual simulation.

Participants included 39 teachers and staff members from the rural high school. Twenty-six participants completed the "At Risk for Elementary School Educators" simulation and 13 participants completed the "At Risk for High School Educators" simulation.

#### **Measurement Instruments**

A variation of the Gatekeeper Behavior Scale (GBS) was used as a pre-survey and post-survey to measure DNP project outcomes. A follow-up survey was sent out two months after the completion of the project. The number of referrals before the DNP project was compared to the number of referrals three months after completing the project.

The GBS has high internal consistency using the 3-factor model based on the subscales of preparedness, likelihood, and self-efficacy (Timmons-Mitchell, Albright, McMillan, Shockley & Cho 2019). The effectiveness of training between pre-survey and post-survey scores was assessed on (a) participant preparedness to assist a student in psychological distress, (b) likelihood of engaging in helping behaviors, and (c) selfefficacy to engage in such behaviors. The pre-/post-test evaluated preparedness by viewing the average scores of two separate items; self-efficacy was evaluated by viewing the average scores of six separate items; likelihood was evaluated by viewing the average score of three different items (Timmons-Mitchell et al., 2019).

Two months following the implementation of the DNP project, anonymous surveys were sent to all participants. Surveys included self-reflection questions regarding

teachers' and staffs' perception of any improvements in their ability to recognize adolescents in psychological distress and refer those students to guidance counselors. The survey was created and distributed by Kognito through a SurveyMonkey<sup>TM</sup> link to the participants' work email.

#### **Data Collection Procedures**

The first step of implementation was to collect data from a pre-and post-survey. A pre-survey and post-survey were embedded into the program for teachers and staff to complete in the Kognito simulation. A follow-up survey was sent out to teachers and staff two months after implementing the project through their work email. The data from the follow-up survey was collected through the utilization of SurveyMonkey<sup>™</sup>. The data from the pre-survey, post-survey, and follow-up survey was uploaded in de-identified format by Kognito and was exported to a Comma-Separated Values (CSV) file and stored on a jump drive in a secure, locked location. The school guidance counselors provided the number of referrals in a de-identified format from teachers and staff starting August 10, 2020, through March 2021.

#### **Data Analysis**

The formative evaluation consisted of administering a pre-test survey embedded into the Kognito program that established a baseline level of preparedness to assist a student in psychological distress, the likelihood of engaging in helping behaviors, and the teachers' or staff member's self-efficacy to engage in such behaviors. The post-survey assessed any increase in the level of preparedness, likelihood of engaging in helping behaviors, and self-efficacy to engage in such behaviors. For the program's overall evaluation, pre-and post-test surveys were compared to evaluate effectiveness.

The data are primarily descriptive. In the pre-test, both elementary and high school teachers were asked about their preparedness to recognize students in distress and talk about them. Both groups reported being moderately prepared, and there was no statistical difference between the elementary and high school teachers.

There were six items asked in both the pre- and post-surveys related to teachers recognizing and helping students in psychological distress. The elementary survey included an additional item about talking to parents. Because the responses to the preand post-surveys were not matched, an unpaired t-test was used to determine whether the training seemed effective in helping teachers recognize and respond appropriately.

#### Results

Twenty-six teachers and staff members completed the "At Risk for Elementary School Educators" and 13 completed the "At Risk for High School Educators." High school teachers and staff members indicated they felt significantly more confident in their ability to recognize when students were exhibiting signs of psychological distress after completing the training (see Appendices F and G).

Comparing the responses before and after training indicated high school teachers' ratings on three of the items were significantly higher after training: "I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress" (t(22) = 2.1994, p=.038), "I feel confident in my ability to talk to a student in psychological distress to motivate them to connect with mental health support services" (t(22) = 2.7391, p=.012), and "I feel confident that I can help a suicidal student seek help" (t(22) = 2.3820, p=.026).

Among the elementary teachers, results were similar on the above three statements. Elementary teachers agreed more after the training with the statements regarding ability to recognize students in distress (t(43) = 4.8946, p < .001), talk to such students (t(43) = 3.8479, p=.004), and help suicidal students (t(43) = 4.4401, p < .001). The change in a fourth item shared among the two groups showed a significant increase among the elementary teachers after the training: "I think that a student who is receiving mental health treatment is showing a sign of personal strength" (t(43) = 2.4792, p=.017). A fifth item that was not on the high school survey also showed a statistically significant increase after the training: "I feel confident in my ability to help parents be informed mental health support services available to a child who is exhibiting signs of psychological distress" (t(43) = 3.3542, p=.001).

On both surveys, two items asked teachers to rate their preparedness to recognize students in psychological distress and to talk to such students to connect them with mental health support services. After the training, high school teachers reported being more prepared to recognize students in psychological distress and the increase was significant (t(22) = 2.0866, p=.048). This was also true of the elementary teachers (t(43) = 2.8250, p=.007). Both groups also reported being more prepared to talk to students in distress after training, but the result was only significant for elementary teachers (t(43) = 4.1048, p=.002).

The elementary survey included two additional items on how prepared they felt to talk to and help parents be informed about mental health support services. After the training, elementary teachers reported feeling much more prepared to talk to parents whose child is exhibiting signs of distress (t(43) = 3.7340, p=.005). They also reported

being more prepared to help parents be informed about available mental health services (t(43) = 2.8507, p=.006).

The number of referrals to school guidance counselors prior to implementing the quality improvement project were 39 referrals in ninth through twelfth grade, 33 referrals in fifth through eighth grade, and 22 referrals in kindergarten through fourth grade. After implementation of the quality improvement project, the number of referrals to the school guidance counselors were 54 referrals in ninth through twelfth grade, 46 referrals in fifth through eighth grade, and 31 referrals in kindergarten through fourth grade. This was a 39% increase in referrals to school guidance counselors after implementing the quality improvement project.

### Discussion

The quantitative quality improvement project was effective in helping educators and staff identify and intervene early with students experiencing psychological distress by increasing referrals to school guidance counselors. Overall, participants felt the program was effective in helping them recognize students in psychological distress and respond appropriately. Given the high rate of suicide in adolescents, this program is an important tool for preparing teachers and staff members to recognize and intervene early with students at risk for suicide. Participants indicated they felt more confident in their ability to talk to students in psychological distress to motivate them to connect with mental health support services, and they felt more confident that they could assist a suicidal student to seek help.

Results were similar among participants who completed the "At Risk for Elementary School Educators" training. They had a significant increase after training in

regard to their confidence and ability to recognize students in distress, talk to such students, and help suicidal students seek help. These participants showed a significant increase in their belief that a student who is receiving mental health treatment is showing a sign of personal strength. They also showed a statistically significant increase in their confidence and ability to help parents be informed of mental health support services available to a child who is exhibiting psychological distress. The elementary participants reported feeling much more prepared to talk to parents whose child is exhibiting signs of distress, and felt more prepared to help parents be informed of available mental health

Participants from both "At Risk for High School Educators" and "At Risk for Elementary School Educators" reported being more prepared to recognize students in psychological distress and reported being more prepared to talk to students in distress after completing the program. The number of referrals before the program's implementation was compared to the number of referrals three months after completing the program, determining an increase in referrals after completion.

# Limitations

Future research with a larger sample size from other school districts is recommended in order to determine if the results are related directly to the small school size and rural area. It is also recommended to repeat the study when a majority of teachers and staff are on campus to participate. Due to the COVID-19 pandemic, there were disruptions that caused the school to close for long periods of time.

# **Practice Recommendations**

This DNP project demonstrated that implementing an evidence-based professional

development program helped build teachers' and staff's skills that support early identification and intervention with students experiencing psychological distress, leading to suicide. Teachers spend most of the day with their students and they may be the best professionals to recognize and intervene with adolescence at risk for psychological problems that could lead to suicide (Bradley & Kendall, 2019). It is important for teachers and staff members to recognize adolescents at risk for suicide and intervene early. They should feel confident in their ability to recognize at risk students, and not be fearful or reluctant to discuss their concerns with those students and their parents. The project effectively helped teachers and staff members feel more prepared and confident in their ability to recognize students in distress, talk to such students, and help suicidal students seek help by connecting those students with school guidance counselors.

#### **Cost-Benefit Analysis/Budget**

The budgetary needs for the project were the cost of licenses. Each individual license was \$32.00. There were a total of 125 licenses needed for the teachers and staff. Funding was awarded by House Majority Leader Ledbetter and Senator Livingstone in the amount of \$4,000. This funding went toward the purchase of mental health virtual simulation programs from Kognito. Sixty-two licenses were purchased for the elementary school teachers and staff, and 63 licenses were purchased for the high school teachers and staff. There were no other budgetary needs for implementing the project as all resources and supplies were obtained through in-house items already purchased by the school district. The DNP student provided data collection and analysis.

#### Timeline

The DNP proposal was submitted for evaluation on September 11, 2020. Upon successful completion, the proposal was sent to the Institutional Review Board (IRB) for approval by September 25, 2020.

The letter to encourage participation in the DNP project was sent out the third week in September 2020, and the project was completed by the end of January 2021. The dates of completion for each aspect of the DNP project were:

- Kognito licenses were purchased on September 11, 2020.
- A letter of encouragement to participate was sent via email by September 20<sup>th</sup>, 2020.
- On November 9, 2020, the instructions for registration and product key were available to teachers and staff through work email. The pre-survey and post-survey were embedded into the Kognito program.
- The two-month follow-up surveys were sent through work email beginning February 21, 2021 and completed by March 15, 2021.

#### **Ethical Considerations/Protection of Human Subjects**

The Jacksonville State University Institutional Review Board (IRB) approval was obtained before initiating the DNP project (see Appendix I). Participation in the DNP project was entirely voluntary, and participants could have withdrawn at any time without penalty. The high school principal provided a letter of approval to implement the program in the school system. An information session was conducted and those interested in participation received an informed consent document describing the DNP project. The project was completely voluntary and confidential. Participants had the opportunity to ask questions prior to signing the informed consent. Once all questions were answered, informed consent documents were signed.

There was a potential risk of inconvenience for participants because of the project being completed during work hours. The principal agreed to allow teachers and staff a four-week window during a period of time at school that was less demanding on faculty and staff. There was a potential risk for the professional development to bring up past memories or experiences, thus creating an emotional risk. If this risk occurred, the participant would have been referred to a counselor. Any identifiable data collected for registration was on a separate secure server not available to the researcher. All data were de-identified when used for analysis and could not be linked to individual users. The de-identified data was exported into a CVS file and was password protected. The DNP student was the only one with access to the CVS file.

#### Conclusion

In conclusion, addressing suicide in America's youth is imperative for the reason that suicide is a leading cause of death among youth, with the sharpest increase in the number of suicide deaths occurring between early adolescence and young adulthood. Suicide was the 10<sup>th</sup> leading cause of death in Alabama in 2019, and the rate of suicide in Alabama was 16.8 per 100,000 population (ADPH, 2020; Cha et al., 2018). Teachers play an important role in identifying students at risk for mental health issues; however, studies have found that teachers may not know how to identify the risk factors of suicide or how to engage youth in a conversation about suicide risk (Marsh, 2016; Robinson-Link et al., 2019).

Professional development programs and interactive simulations, such as those

designed by Kognito, have proven to help teachers and staff to identify and intervene with adolescents at risk for suicide by engaging in hands-on practice leading conversations with virtual, fully animated, and emotionally responsive students that are scientifically designed to embody specific personalities, attitudes, and medical/behavioral health conditions (Kognito, 2020).

This DNP project showed that implementing an evidence-based professional development program helped build teachers' and staff's skills that support early identification and intervention with students experiencing psychological distress, leading to suicide.

Participants were voluntarily enrolled in virtual professional development by Kognito. Once enrolled, the participant completed the two-hour program over four weeks. A pre-test and post-test designed by Kognito were collected on every participant. The number of referrals before the program's implementation was compared to the number of referrals three months after completing the program, demonstrating an increase in referrals after completion.

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### APPENDIX A

#### Letter of Approval

# Plainuiew Righ School

Dr. Richard Rutledge, Principal Marilyn Bryant, Asst. Principal Chris Clark, Asst. Principal

Sept. 10, 2020

To whom it may concern:

I am the Principal of Plainview School in Rainsville, AL. I am eager for our faculty to participate in Mrs. Wendy Holloway's DNP project for evidence-based mental health professional development. I believe this professional development project will help our faculty in identifying psychological distress and assist in early intervention.

Therefore, as principal of Plainview School, I approve the implementation of this project at our school. I look forward to working with Mrs. Holloway on this project. Please contact me at 256-638-3510 if you have any further questions.

Respectfully,

Rich Lato Dr. Richard Rutledge

#### APPENDIX B

#### **Informed Consent**

Dear Participant,

This is an informed consent document describing the DNP project I would like you to voluntarily participate in. The title of the study is Increasing Referrals to School Counselors by Integrating an Evidence-Based Program for Educators Identifying Adolescents at Risk for Suicide in a Rural High School. The purpose of the research is to increase referrals to school counselors by integrating an evidence-based program for educators identifying adolescents at risk for suicide in a rural high school. A letter will be sent to each participant via work email to encourage participation in the program. This will be a mental health professional development program to help teachers and staff identify and intervene with students who may be experiencing psychological distress that can lead to suicide. A virtual simulation program by Kognito will be used to educate the teachers and staff members. An attachment will be sent in an email that has directions on how to create a Kognito account and the email will include the product key to begin the simulation. There will be a pre-test and post-test embedded in the simulation. It will take the participants approximately one hour to complete the Kognito virtual simulation.

There is a potential risk of inconvenience for you as a participant due to the project being completed during work hours. The principal has agreed to allow the teachers and staff a two-week window during a period of time at school that is less demanding on the faculty and staff. There is also a potential risk for the professional development to bring up past memories or experiences, thus creating an emotional risk. If this risk occurs, you as the participant will be referred to a counselor.

All records from the study will be confidential. The data from the pre-survey, post-survey, and follow-up survey will be uploaded in de-identified format by Kognito and will be exported to a Comma Separated Values (CSV) file and stored on a jump drive in a secure, locked location. The school guidance counselors will provide the number of referrals in a de-identified format. When the results of the study are published, the high school will not be named in the study nor in the results. The participants are anonymous. I will be the only person with access to the results of the surveys. Participation is completely voluntary, and you may withdraw at any time. If you chose to participate or not participate, it will not impact your employment. If you have any questions or in the event of a research-related injury or emergency, you may contact me at 256-996-6841 or by email at wholloway@stu.jsu.edu. I appreciate your participation and time in this project.

### Kind regards,

Wendy Holloway, MSN, RN

## APPENDIX B (CONTINUED)

## **SIGNATURE PAGE OF CONSENT FORM** FOR RESEARCH INVOLVING ADULTS

### Increasing Referrals to School Counselors by Integrating an Evidence-Based

Program for Educators Identifying Adolescents at Risk for Suicide in a Rural High

School

Title of Project

I have read a description of the research project/study, and I understand the procedure described on the attached pages. I also have received a copy of the description.

I	agree	to	participate	in
the study.				

Complete Name

Signature

Date

Jacksonville State University, AL

Consent Form: Research Involving Adults

#### APPENDIX C

#### **Letter Encouraging Participation**

Hello Faculty and Staff.

My name is Wendy Holloway, and I am implementing my DNP project at Plainview High School. This is an evidence-based mental health professional development program to help you identify and intervene with students who may be experiencing psychological problems which could lead to suicide. Dekalb County's suicide rates have tripled over the past three years with suicide being the second leading cause of death among all 15 to 24-year-olds." At-Risk for Elementary Students" and "At-Risk for High School Students. House Majority Leader Nathaniel Ledbetter and Senator Steve Livingston have been kind enough to fund the cost for purchasing the licenses for all faculty and staff at Plainview.

If you choose to participate, an email will be sent out around October 19<sup>th</sup>, 2020 with instructions and a code for creating your account in Kognito. It should take around 1 hour to complete. I will follow up with a quick survey in SurveyMonkey in January 2021 to reevaluate your thought s of the program. Participation in this program is completely voluntary and there is not a penalty if you back out at any time. However, I highly encourage you to take part in the program to help the children in our school system. Thank you in advance for your consideration. If you have any questions at all, please feel free to contact me by phone at 256-996-6841 or email at hollowayw@nacc.edu.

Kind Regards,

Wendy Holloway, MSN, RN

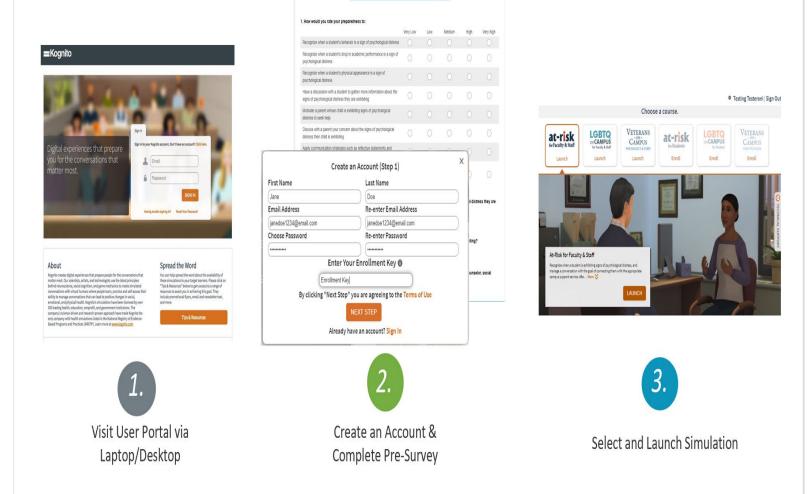
APPENDIX D

## **Instructions for Registration**

# **Kognito**

# Conversations that change lives.

# Accessing the Kognito Simulations



# APPENDIX E

# **Elementary Pre-Test Survey**

# Please answer the following questions. All your answers will remain confidential.

1. Please indicate your preparedness to:	Very Low	Low	Medium	High	Very High
Recognize when a student is exhibiting signs of psychological distress (for example-being anxious, depressed, or disengaged).					
Talk with a student to gather more information about the signs of psychological distress they are exhibiting.					
Talk with a parent whose child is exhibiting signs of psychological distress to motivate them to connect with mental health support services.					
Help parents be informed about mental health support services (such as a guidance counselor, social worker, school psychologist) available to a child who is exhibiting signs of psychological distress.					
2. Please indicate how much you disagree/agree with the following statements	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress.					
I feel confident in my ability to talk with a student to gather more information about the signs of psychological					
distress they are exhibiting. I feel confident in my ability to talk with a parent whose child is exhibiting signs of					
psychological distress to motivate them to connect with mental health support services.					

I feel confident in my ability to help parents be					
informed about mental health support services					
available to a child who is exhibiting signs of					
psychological distress.					
I think that a student who is receiving mental					
e e					
health treatment is showing a sign of personal					
strength.					
Most teachers and staff in my school think that					
a student who is receiving mental health					
treatment is showing a sign of personal					
weakness.					
Part of the role of teachers and staff in my					
school is to connect students experiencing					
psychological distress with mental health					
support services.					
3. In the past two academic months,					
approximately how many students have					
you (Fill in the Blank)					
Been concerned about due to their psychological	distress?				
Approached to gather more information about th	e signs of ps	sychological	l distress the	ey are exl	nibiting?
4. In the past two academic months, approxim	nately how	many pare	nts have yo	u (Fil	l in the
	·	~ 1	v	× ×	
Blank)					
Approached to discuss your concerns about the s	signs of psyc	hological d	istress their	child is	
exhibiting?					

Talked with to motivate them to connect their child with mental health support services?

Helped inform about mental health support services (such as guidance counselor, social worker, school psychologist) available to a child who is exhibiting signs of psychological distress?

## **Elementary Post-Test Survey**

# Please answer the following questions. All your answers will remain confidential.

1. Did you use a mobile device to access the simulation?	Yes:	No:			
2. Did you run into any technical difficulties in accessing or launching the simulation?					
3. If yes, please describe.					
4. Please indicate your preparedness to:	Very Low	Low	Medium	High	Very High
Recognize when a student is exhibiting signs of					
psychological distress (for example-being anxious,					
depressed, or disengaged).					
Talk with a student to gather more information					
about the signs of psychological distress they are					
exhibiting.					
Talk with a parent whose child is exhibiting signs					
of psychological distress to motivate them to					
connect with mental health support services.					
Help parents be informed about mental health				1	
support services (such as a guidance counselor,					
social worker, school psychologist) available to a					
child who is exhibiting signs of psychological					
distress.					

Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
U	Neither Disagree nor	Agree	Strongly Agree
	Agree		
	Disagree	e Disagree nor	e Disagree nor

Classroom safety will improve.								
My relationship with students will improve.								
7. Overall, how would you rate the simulation?	Poor	Good	Very Good	Excellent				
8. Would you recommend this simulation to other educators and school staff?	Yes	No						
9. Is the simulation based on scenarios relevant to you as an educator or school staff member?	Yes	No						
10. How many years have you worked in education total?								
11. What is your main employment status?	·	·						
Teacher:								
Administrator:								
Health/Mental Health Specialist (Nurse, Counsel	or, Psycholog	ist, Social Wo	rker):					
Staff Member:								
Paraprofessional:								
Off-Campus community member (i.e. parent):								
School Resource Officer:								
Other (please specify):	1	Γ	Ι	1	Γ			

12. Please select the grade level that you work with:	Pre-K	Elementary	Middle/ Junior High	High School	Multiple
13. How did you hear about this simulation?					
Email:					
School Club or Organization:					
Counseling Center Website:					
Poster:					
Flyer:					
Conference:					
Other: (please specify)					
14. From whom did you hear about this simulation	on?				
Administrator:					
Faculty or Staff Member:					
Student:					
Counseling Center Personnel:					
Other: (please specify)					
15. What is your gender?					

Male:			
Female:			
I prefer not to answer:			
Prefer to self-describe:			
16. What is your age?			
17. Are you Hispanic/Latinx			
Yes:			
No:			
I prefer not to answer:		 	
18. If yes, which group represents you (select one	or more)?		
16. If yes, which group represents you (select one	or more):		
Mexican, Mexican American, or Chicano:			
Puerto Rican:			
Cuban:			
Dominican:			
Central American:			
South American:			
I prefer not to answer:			
Does not apply:			

19. What is your race?					
American Indian/Alaska Native:					
Asian:					
Black/African American:					
Native Hawaiian/Other Pacific Islander:					
Caucasian:					
I prefer not to answer:					
20. What did you like best about the simulation?					
21. What would you change to make it more effect	ctive?				
22. What other topics/issues would you like to lea	rn about usii	ng this type of	simulation	?	
		_ <b>vi</b>			

23. Now that you have completed the simulation, please describe a situation that you would have managed differently. What happened and what would you have done differently? Please be sure not to include any identifiable information.

## **Elementary Follow-up Survey**

## Please answer the following questions. All your answers will remain

## confidential.

1. Please indicate your preparedness to:	Very	Low	Medium	High	Very
	Low				High
Recognize when a student is exhibiting signs of					
psychological distress (for example-being					
anxious, depressed, or disengaged).					
Talk with a student to gather more information					
about the signs of psychological distress they are					
exhibiting.					
Talk with a parent whose child is exhibiting signs					
of psychological distress to motivate them to					
connect with mental health support services.					
Help parents be informed about mental health					
support services (such as a guidance counselor,					
social worker, school psychologist) available to a					
child who is exhibiting signs of psychological					
distress.					

2. Please indicate how much you disagree/agree with the following statements	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel confident in my ability to recognize when a					
student is exhibiting signs of psychological					
distress.					
I feel confident in my ability to talk with a student					
to					
gather more information about the signs of					
psychological					
distress they are exhibiting.					
I feel confident in my ability to talk with a parent					
whose child is exhibiting signs of psychological					
distress to motivate them to connect with mental					
health support services.					
I feel confident in my ability to help parents be					
informed about mental health support services					
available to a child who is exhibiting signs of					
psychological distress.					
I think that a student who is receiving mental					
health treatment is showing a sign of personal					
strength.					
Most teachers and staff in my school think that a					
student who is receiving mental health treatment					
is showing a sign of personal weakness.					
Part of the role of teachers and staff in my school					
is to connect students experiencing psychological					
distress with mental health support services.					
3. In the past two academic months,					
approximately how many students have you					
(Fill in the Blank)					
Been concerned about due to their psychological di	stress?	1	I	I	

Approached to gather more information about the s	igns of psyc	hological di	stress they a	are exhibi	iting?
				Γ	
4. In the past two academic months, approxima	tely how ma	iny parents	have you	(Fill in	the
Blank)					
Approached to discuss your concerns about the sign	ns of psycho	logical distr	ess their chi	ild is exh	ibiting?
Talked with to motivate them to connect their child	with mental	health sup	oort services	5?	
Helped inform about mental health support services	s (such as gu	idance cour	selor, socia	l worker,	school
psychologist) available to a child who is exhibiting	signs of psy	chological o	listress?		
5. As a result of taking this simulation, there	Yes	No			
has been an increase in the number of students that I have:					
Been concerned about due to their psychological					
distress.					
Approached to gather more information about the					
signs of psychological distress they are exhibiting.					
6. As a result of taking this simulation, there	Yes	No			
has been an increase in the number of parents					
that I have:					

Approached to discuss concerns about the signs					
of psychological distress their child is exhibiting.					
Talked with to motivate them to connect their					
child with mental health support services.					
Helped inform about mental health support					
services (such as a guidance counselor, social					
worker, school psychologist) available to a child who is exhibiting signs of psychological distress.					
7. As a result of this simulation, there has been					
an increase in the number of conversations I					
have had with other <u>teachers, staff, and/or</u> <u>administrators</u> :					
Regarding students that I am concerned about.					
About overall mental health in my school.					
8. Please indicate how much you	Strongly	Disagree	Neither	Agree	Strongly
disagree/agree with the following statements	Disagree		Disagree		Agree
that begin with: As a result of applying the skills learned in the			nor Agree		
simulation:					
Student attendance increased.					
Student attendance increased. Student academic success improved.					
Student academic success improved.					
Student academic success improved. The school learning environment became more					
Student academic success improved. The school learning environment became more supportive.					

• •	what would y	9. Now that you have completed the simulation, please describe a situation that you would have managed differently. What happened and what would you have done differently? Please be sure not to include any identifiable information.								

# High School Pre-Test Survey

# Before we begin the simulation, please answer the following questions. All your answers will remain confidential.

1. Please indicate your preparedness to:	Very Low	Low	Medium	High	Very High
Recognize when a student is exhibiting signs of psychological distress (for example-being anxious, depressed, or disengaged).					
Talk with a student in psychological distress to motivate them to connect with mental health support services.					
2. Please indicate how much you disagree/agree with the following statements	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress.					
I feel confident in my ability to talk with a student in psychological distress to motivate them to connect with mental health support services.					

I feel confident that I can help a suicidal student				
seek help.				
as I think that a student who is receiving mental				
health treatment is showing a sign of personal				
strength.				
Most teachers and staff in my school think that				
a student who is receiving mental health				
treatment is showing a sign of personal				
weakness.				
Part of the role of teachers and staff in my				
school is to connect students experiencing				
psychological distress with mental health				
support services.				
support bervices.				
3. In the past two academic months,				
approximately how many students have				
you (Fill in the Blank)				
Been concerned about due to their psychological	distress?			
Approached to discuss your concerns about their	nevehologia	al distrace?		
Approached to discuss your concerns about their	psychologic	ai uisu ess?		
Discussed a referral to a mental health specialist	(such as the	counselor)?		
•	×	)		
1				

# High School Post-Test Survey Before we begin the simulation, please answer the following questions. All your answers will remain confidential.

1. Please indicate your preparedness to:	Very Low	Low	Medium	High	Very High
Recognize when a student is exhibiting signs of psychological distress (for example-being					
anxious, depressed, or disengaged). Talk with a student in psychological distress to motivate them to connect with mental health support services.					
2. Please indicate how much you disagree/agree with the following statements	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress.					
I feel confident in my ability to talk with a student in psychological distress to motivate them to connect with mental health support services.					
I feel confident that I can help a suicidal student seek help.					
I think that a student who is receiving mental health treatment is showing a sign of personal strength.					
Most teachers and staff in my school think that a student who is receiving mental health treatment is showing a sign of personal weakness.					
Part of the role of teachers and staff in my school is to connect students experiencing psychological distress with mental health support services.					

All teachers and staff in my school should take			
this simulation.			

3. Please indicate how much you disagree/agree with the following statements that begin with:If I apply the skills taught in the simulation:Student attendance will increase.	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
Student academic success will improve.					
The school learning environment will become more supportive.					
Classroom safety will improve.					
My relationship with students will improve.					
4. Overall, how would you rate the simulation?	Poor	Good	Very Good	Excellent	
5. Would you recommend this simulation to other educators and school staff?	Yes	No			
6. Is the simulation based on scenarios relevant to you as an educator or school staff member?	Yes	No			
7. How many years have you worked in	education to	otal?			

8. What is your main employment status	?								
Teacher:									
Administrator:									
Health/Mental Health Specialist (Nurse, Counselor, Psychologist, Social Worker):									
Staff Member:									
Paraprofessional:									
Off-Campus community member (i.e. pa	rent):								
School Resource Officer:									
Other (please specify):		1							
9. Please select the grade level that you	Pre-K	Elementary	Middle/	High	Multiple				
work with:	110-K		Junior	School	munipic				
			High						
10. How did you hear about this simulat	ion?								
Email:									
School Club or Organization:									
Counseling Center Website:									
Poster:									
Flyer:									
Conference:									
Other: (please specify)									

11. From whom did you hear about this	simulation?			
Administrator:				
Faculty or Staff Member:				
Student:				
Counseling Center Personnel:				
Other: (please specify)	Γ		1	
12. What is your gender?				
Male:				
Female:				
I prefer not to answer:				
Prefer to self-describe:				
13. What is your age?				
14. Are you Hispanic/Latinx				
Yes:				
No:				

I prefer not to answer:								
15. If yes, which group represents you (se	elect one or 1	nore)?						
Mexican, Mexican American, or Chicano	:							
Puerto Rican:								
Cuban:								
Dominican:								
Central American:								
South American:								
I prefer not to answer:								
Does not apply:								
16. What is your race?								
American Indian/Alaska Native:								
Asian:								
Black/African American:								
Native Hawaiian/Other Pacific Islander:								
Caucasian:								
I prefer not to answer:								

17. What did you like best about the sim	ulation?				
17. What the you like best about the sim					
	•				
18. What would you change to make it n	nore effective	?			
19. What other topics/issues would you li	ke to learn a	bout using thi	s type of sir	nulation?	
	1				

20. Now that you have completed the simulation, please describe a situation that you would have managed differently. What happened and what would you have done differently? Please be sure not to include any identifiable information.

# High School Follow-up Survey

# Before we begin the simulation, please answer the following questions. All your answers will remain confidential.

1. Please indicate your preparedness to:	Very Low	Low	Medium	High	Very High
Recognize when a student is exhibiting signs of psychological distress (for example-being anxious, depressed, or disengaged). Talk with a student in psychological distress to					
motivate them to connect with mental health support services.					
2. Please indicate how much you disagree/agree with the following statements	Strongly Disagree	Disagree	Neither Disagree nor Agree	Agree	Strongly Agree
I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress.					
I feel confident in my ability to talk with a student in psychological distress to motivate them to connect with mental health support services.					

I feel confident that I can help a suicidal student				
seek help.				
I think that a student who is receiving mental				
health treatment is showing a sign of personal				
strength.				
Most teachers and staff in my school think that a				
student who is receiving mental health treatment is				
showing a sign of personal weakness.				
Part of the role of teachers and staff in my school				
is to connect students experiencing psychological				
distress with mental health support services.				
3. In the past two academic months,				
approximately how many students have you				
(Fill in the Blank)				
Been concerned about due to their psychological dis	stress?			
Approached to discuss your concerns about their ps	ychological d	listress?		
Discussed a referral to a mental health specialist (su	ch as the cou	nselor)?		
Discussed a referrar to a mentar nearth specialist (su		113010171		
				[
3. In the past two academic months,				
approximately how many students have you				
(Fill in the Blank)				

Been concerned about due to their psychological distress?

Approached to discuss your concerns about their signs of psychological distress?

Discussed a referral to a mental health specialist (such as the counselor)?

4. As a result of taking this simulation, there	Yes	No			
has been an increase in the number of students	105	1.00			
that I have:					
Been concerned about due to their psychological					
distress.					
Approached to discuss concerns about their					
psychological distress.					
Discussed a referral to a mental health specialist					
(such as the counselor).					
5. As a result of this simulation, there has been					
an increase in the number of conversations I					
have had with other <u>teachers, staff, and/or</u>					
<u>administrators</u> :					
Regarding students that I am concerned about.					
About overall mental health in my school.					
6. Please indicate how much you	Strongly	Disagree	Neither	Agree	Strongly
disagree/agree with the following statements	Disagree		Disagree		Agree
that begin with:			nor		
As a result of applying the skills learned in the simulation:			Agree		

Student attendance increased.							
Student academic success improved.							
The school learning environment became more supportive.							
Classroom safety improved.							
My relationship with students improved.							
7. Now that you have completed the simulation, please describe a situation that you would have managed differently. What happened and what would you have done differently? Please be sure not to include any identifiable information.							

## APPENDIX F

Pretest		Posttest	
Μ	SD	Μ	SD
3.15	0.53	3.68	0.73
2.96	0.71	3.79	0.61
2.88	0.75	3.68	0.65
2.92	0.83	3.79	0.67
gree with the	e following	statements:	
3.50	0.50	4.16	0.36
3.54	0.63	4.16	0.36
2.92	0.87	3.95	0.60
	M           3.15           2.96           2.88           2.92           gree with the           3.50           3.54	M         SD $3.15$ $0.53$ $2.96$ $0.71$ $2.88$ $0.75$ $2.92$ $0.83$ gree with the following $3.50$ $3.54$ $0.63$	M         SD         M $3.15$ $0.53$ $3.68$ $2.96$ $0.71$ $3.79$ $2.88$ $0.75$ $3.68$ $2.92$ $0.83$ $3.79$ gree with the following statements: $3.50$ $0.50$ $4.16$ $3.54$ $0.63$ $4.16$

 Table 1. Mean and Standard Deviation for Pre- and Post-Test "At Risk for Elementary

 School Educators"

2.15	0.91	1.89	1.21
4.15	0.66	4.32	0.46
	-		

Note. M = Mean SD = Standard Deviation

# APPENDIX G

	Pre	Pretest		ttest	
Q1. Please indicate your preparedness to:	М	SD	М	SD	
Recognize when a student is exhibiting signs of psychological distress	3.23	0.80	3.91	0.79	
Talk with a student in psychological distress to motivate them to connect with mental health support services	3.08	1.04	3.82	0.83	
Q2. Please indicate how much you disagree/ag	ree with the	e following s	tatements:		
I feel confident in my ability to recognize when a student is exhibiting signs of psychological distress.	3.69	0.82	4.36	0.64	
I feel confident in my ability to talk with a student in psychological distress to motivate them to connect with mental health support services	3.15	1.10	4.27	0.86	
I feel confident that I can help a suicidal student seek help.	3.54	0.84	4.27	0.62	
I think that a student who is receiving mental health treatment is showing a sign of personal strength	4.15	0.77	4.55	0.50	
Most teachers and staff in my school think that a student who is receiving mental health treatment is showing a sign of personal weakness	2.62	1.33	2.82	1.19	
Part of the role of teachers and staff in my school is to connect students experiencing psychological distress with mental health support services	4.15	0.53	4.36	0.48	

Table 2. Mean and Standard Deviation Pre- and Post-Test "At Risk for High School Educators"

# APPENDIX H

## Timeline

Task	September	October	November	December	January	February	March	April
Purchase of Kognito license	Х							
Recruitment of eligible participants	Х	Х						
Intervention;		Х						
Pre- test/Post-test		Х			Х			
Follow-up Survey					Х			
Evaluation; Toolkit					Х			
Analysis						Х	Х	Х
Results presented to local providers								Х

# Table 3. Simplified Project Timeline

### APPENDIX I IRB Approval



OFFICE OF THE VICE PROVOST JACK SONVILLE STATE UNI VERSICY

October 7, 2020

Dear Wendy Holloway:

Your proposal submitted for review by the Human Participants Review Protocol for the project titled: "Increasing Referrals to School Counselors by Integrating an Evidence-Based Program for Educators Identifying Adolescents at Risk for Suicide in a Rural High School" has been approved as exempt. If the project is still in process one year from now, you are asked to provide the IRB with a renewal application and a report on the progress of the research project.

Sincerely,

6e /

Joe Walsh Executive Secretary, IRB JW/dh