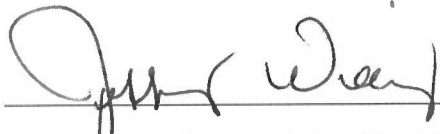


Implementation of a Bystander Intervention Model to Promote Referrals to and Enhance
Utilization of Mental Health Resources by Students in a Community College Setting

By Jessica Powers & Lindsey Wright Leeds

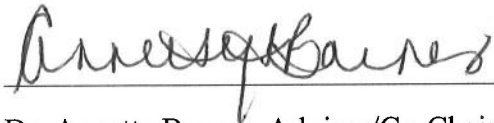
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Dr. Jeffrey Willey, Advisor/Co-Chair

6/8/2022

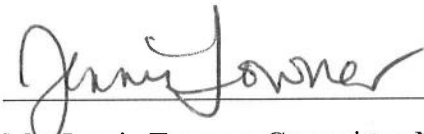
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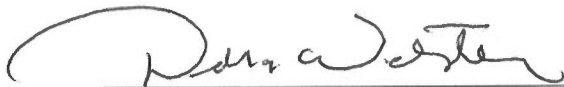
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Running head: BEVOCAL PROMOTES COLLEGE STUDENT MENTAL HEALTH

Implementation of a Bystander Intervention Model to Promote Referrals to and Enhance
Utilization of Mental Health Resources by Students in a Community College Setting

By

Jessica Powers & Lindsey Wright Leeds

DNP Project submitted to the School of Nursing
of Salisbury University in partial fulfillment of the requirements
for the degree of
Doctor of Nursing Practice
May 6, 2022

BEVOCAL PROMOTES COLLEGE STUDENT MENTAL HEALTH

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By

Jessica Powers and Lindsey Wright Leeds

2022

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Lindsey Wright Leeds

Abstract

The coronavirus (COVID-19) pandemic increased college students' risk and prevalence of mental health conditions. However, campus mental health resources have been underutilized, and referral of students in need hindered by bystanders' (i.e., faculty, staff, peers) lack of preparedness. This Doctor of Nursing Practice (DNP) project aimed to improve bystanders' preparedness using evidence-based practice (EBP). Expected outcomes included increased referrals to and utilization of mental health resources and improved access to care for college students. Guided by Social Cognitive Theory and Bystander Effect Theory, the project also focused on the concepts of self-efficacy and confidence. Workshops, based on the BeVocal bystander intervention model, were provided virtually to volunteers from a suburban, community college's faculty/staff and student populations. Participants completed anonymous surveys for demographic data and Gatekeeper Behavior Surveys for self-rated confidence, preparedness, and likelihood to act pre- and post-workshop. A postcard was developed and provided for participants as a resource post training. Significant improvement was found post-workshop in participants' preparedness ($p<0.001$), self-efficacy ($p<0.001$), and likelihood to intervene ($p=0.002$) for both sample groups. A 115.09% increase in concerning behavior reports and an 87.54% increase in referrals to college mental health resources occurred during the four months after the workshop implementation. Access to mental health care for college students was promoted through community engagement and increased preparedness to recognize and refer. Based upon the results, the BeVocal bystander intervention model and workshops will be continued at the community college through a grant obtained for the program.

Table of Contents

Acknowledgements	iii
Abstract	viii
List of Tables	viii
List of Figures	ix
Project Overview	1
Background and Significance	1
Problem Statement	2
Purpose of the Project	5
Clinical Question	5
Review of Literature	6
Search Strategy	6
Synthesis	6
Themes	7
Variation in Concept Definitions and Populations	11
Strength of the Evidence	12
Overview of the Theoretical Frameworks	14
Concept Definitions	15
Evidence-Based Practice (EBP) Model	16
Project Design	17
Methodology	17
Participants	18
Setting	19

Tools.....	19
Intervention	20
Data Collection Procedures.....	21
Organizational System Analysis	22
Implementation Timeline.....	24
Project Implementation	25
Summative Evaluation of Project Implementation	26
Barriers and Facilitators	26
Analysis and Discussion of Findings	32
Demographic Data Analysis	32
Outcomes Analysis.....	37
Economic Considerations	46
Implications for DNP Role as Leader/Innovator	47
Process and Outcome Recommendations	49
Dissemination Plan	50
References	51
Appendix A: PRISMA Diagram.....	62
Appendix B: Table of Evidence.....	63
Appendix C: Participant Informed Consent.....	86
Appendix D: Gatekeeper Behavior Scale	90
Appendix E: Informational Postcard	91
Appendix F: SWOT Analysis	92
Appendix G: Timeline for Implementation	93

Appendix H: Salisbury University IRB Approval	94
Appendix I: Organizational IRB Approval	95
Appendix J: Pre- and Post-Workshop Demographic Survey.....	96

List of Tables

Table 1. Faculty/Staff Demographics.....	34
Table 2. Student Demographics.....	36
Table 3. Descriptive Statistics of GBS Outcomes.....	39
Table 4. Independent Sample t-Test Pre- versus Post-Workshop for Both Populations...	41
Table 5. Independent Sample t-Test for Both Populations Comparing Pre-to Post Workshop.....	43
Table 6. Mann-Whitney U Test for both Populations Pre- and Post-workshop.....	43
Table 7. Pearson's Correlation Coefficient.....	45
Table 8. Utilization of Resources.....	46

List of Figures

Figure 1. Academic Division of Faculty and Staff.....	35
Figure 2. Academic Division of Students.....	37
Figure 3. Pre- and Post-Workshop Mean Scores by Category.....	44

**Implementation of a Bystander Intervention Model to Promote Referrals to and
Enhance Utilization of Mental Health Resources by Students
in a Community College Setting**

Project Overview

Background and Significance

Adverse mental health conditions, substance abuse, and suicidal ideation increased substantially in the United States (U.S.) since the onset of the coronavirus (COVID-19) pandemic. Populations that have experienced disproportionately worse mental health outcomes include young adults, racial/ethnic minorities, essential workers, and unpaid caregivers (Cziesler et al., 2020). According to a study by the Centers for Disease Control and Prevention (CDC), the prevalence of anxiety disorder symptoms in June 2020 was approximately three times the rate reported in the second quarter of 2019 (25.5% versus 8.1%), and depressive disorder symptoms increased approximately four times in the same time period (24.3% versus 6.5%) (Czeisler et al., 2020). The CDC also reported that one in four people aged 18-24 seriously contemplated suicide in June 2020 (Czeisler et al., 2020).

Increased demand for mental health resources has prompted colleges to respond with robust efforts to improve the availability of these resources to students (Sontag-Padilla et al., 2016). However, improving the availability of resources is not enough to enhance utilization. Sontag-Padilla et al. (2016) found that students and faculty were more likely to utilize on- and off-campus mental health resources if their college campus was supportive of mental health treatment. These findings demonstrated that not only was

it important for campuses to have the resources available for use but that campuses also needed to provide education on the resources and promote a supportive culture.

According to administrators at the suburban community college where this Doctor of Nursing Practice (DNP) project was implemented, mental health resources have been readily available but underutilized, which threatened the continued presence of resources on campus in the future.

The need for mental health service utilization will continue to rise even after the pandemic. Historically, when the U.S. has encountered infectious disease outbreaks, psychological distress lasted for several years after the outbreak resolved; therefore, the psychological impact will likely far outlast the COVID-19 pandemic itself (Panchal et al., 2021). An analysis by Well Being Trust (2021) predicted as many as 75,000 more people would die from drug or alcohol misuse or suicide because of the COVID-19 pandemic. Therefore, the current state of mental health of college students and underutilization of resources presented an urgent problem and a need for an evidence-based practice (EBP) intervention.

Problem Statement

College students' mental health has been studied considerably since the onset of the COVID-19 pandemic due to the identified increased prevalence of and risk for mental health conditions. In an online survey of the mental health of U.S. college students during the pandemic, 71.6% of participants reported increased stress and anxiety (Wang et al., 2020). These findings were consistent with other studies reporting similarly high rates of increased stress, anxiety, and depression in this group (Ding et al., 2020; Huckins et al.,

2020; Islam et al., 2020; Kaleem et al., 2020; Son et al., 2020; Zhang et al., 2020).

According to the Household Pulse Survey administered by the U.S. Census Bureau (2021), symptoms of anxiety and depressive disorder were present in 57% of participants aged 18-29 years old in January 2021. These findings were striking compared to just 11% reporting the same symptoms between January and March 2019 (National Center for Health Statistics, 2020). Research also demonstrated that mandatory quarantine significantly increased mental distress levels in college students (Li et al., 2020; Xin et al., 2020).

College students have been affected by COVID-19 in many ways. Fear of either themselves or others in their social network contracting the virus, apprehension about changes in the methodology of coursework delivery, overall loneliness and isolation, income losses and financial strain, compromised motivation, cancellation of college sports, and sleep disturbances are some examples of the effects of the pandemic (Bullard, 2020; Elmer et al., 2020; Kaleem et al., 2020; Kecojevic et al., 2020; Mahmood et al., 2021; Tasso et al., 2021; Zhang et al., 2020). Despite these increased stressors, a survey of first-year college students in the U.S. revealed that only 24.6% of students would seek help if they had a problem, citing stigma and preference to handle problems by themselves as reasons for not seeking help (Ebert et al., 2019).

While college counselors only see a small proportion of students with mental health disorders, the community college's faculty, staff, and peers have more frequent interactions and are a valuable resource for recognizing signs of mental health concerns and referring students to appropriate resources (Albright & Schwartz, 2017). In a national

survey of faculty, more than 87% believed that it was part of their role to connect students in distress with support services, but more than half reported not feeling adequately prepared to recognize when a student was in psychological distress; and therefore, they would be hesitant to intervene (Albright & Schwartz, 2017). This data demonstrated the need to increase the confidence of college faculty and staff to notice these situations and respond accordingly.

The move to a virtual learning environment added additional complexity to students accessing mental health resources on college campuses. Previous in-person mental health and counseling services were disrupted, leading to increased ambiguity and stress related to accessing and implementing effective services for those in need (Liu et al., 2020). Those students with ongoing mental health concerns that relied on in-person, on-campus counseling needed to transition to virtual modes which for some students was less effective due to learning new processes for accessing services.

Research demonstrated that while most colleges have adequate resources to support their students, the students and faculty/staff are hesitant to use and refer others to use them (Albright & Schwartz, 2017; Ebert et al., 2019). The DNP-prepared nurse in the community college setting can identify health concerns in the college student population such as the underutilization of mental health resources and help to translate research into evidence-based practice to improve population health outcomes. These actions demonstrate application of competencies developed under DNP essentials including DNP Essential III: Clinical Scholarship and Analytic Methods for Evidence Based Practice and

DNP Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health (American Association of Colleges of Nursing, 2006).

Purpose of the Project

The aim of this DNP project was to implement evidence-based practice (EBP) to increase college students and faculty/staff confidence to refer a student to mental health resources after recognizing a mental health concern. Increased confidence of the peer and faculty/staff bystanders should increase utilization of on-campus college and community mental health resources by students in need. The EBP identified was the BeVocal bystander intervention model which consists of a training workshop and an informational postcard with the mission of enhancing bystanders' confidence and motivation to intervene upon recognition of a mental health concern (The Bystander Intervention Initiative of the University of Texas at Austin, n.d.).

Clinical Question

To find a solution to the problem of low bystander confidence contributing to low utilization of campus mental health resources, a clinical question was developed using the Population (P), Intervention (I), Comparison (C), and Outcome (O) format. The clinical question was: "For faculty/staff and students at a community college (P), does implementation of the BeVocal bystander intervention model (I) compared to no bystander intervention model (C) lead to improved student and faculty/staff confidence to intervene (O) and improved referral of students to established mental health resources (O)?"

Review of Literature

Search Strategy

In relation to the clinical question, several electronic databases including PubMed, CINAHL plus with Full Text, Academic Search Complete, Health Source: Nursing/Academic Edition, and MEDLINE with Full Text were searched for articles published between 2016 and 2021. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) diagram (Appendix A) was developed based upon initial search terms “bystander OR gatekeeper” AND “education OR training OR intervention” AND “mental health OR mental illness OR mental disorder OR psychiatric illness OR emotional distress OR suicide” AND “college student*.” Searching yielded a total of 58 articles and an additional six articles were found using the reference lists. Once duplicates were removed, 46 articles were screened for inclusion. Inclusion criteria were peer-reviewed studies involving humans, published in the English language, and published within the last five years (between 2016 and 2021). Articles excluded from the synthesis were those not focused on college students or adults and those not addressing mental health outcomes or evaluating the effectiveness of an evidence-based training program. After screening the full text of the articles, 19 articles met the inclusion criteria as shown in the PRISMA diagram (Appendix A) including 17 quantitative studies and two mixed-methods studies.

Synthesis

Upon analyzing the 19 articles included in the synthesis of the literature, it was evident that the types of training included in the articles were heterogeneous. The

trainings varied in titles, teaching methods, and outcomes measured. Key themes emerged from the literature including the training interaction method used, type of facilitator model, effectiveness of implementation of an evidence-based gatekeeper training model and impacts of training. These findings are outlined in the Table of Evidence (Appendix B).

For this DNP project, the terms “bystander” and “gatekeeper” were used interchangeably as both names were used in the literature to describe training aimed at improving layperson response to mental health distress. The evidence was analyzed and synthesized to identify the EBP intervention and outcomes to be measured.

Themes

Opportunities for Interaction, Role Play, and Skills Practice. Interactive bystander training programs that included the opportunity for role-playing demonstrated an enhanced effect on skills, self-efficacy, and readiness to intervene. Eleven studies utilized an interactive, synchronous training method with positive effects. Reiff et al. (2018) and Ross et al. (2021) concluded that their use of an interactive training method led to improved knowledge, comfort, and readiness to ask someone about suicide intent. Mclean and Swanbrow Becker (2018) also demonstrated a significant increase in knowledge, but insignificant effects on skills. In contrast, a randomized controlled trial (RCT) involving the implementation of a non-interactive film demonstrated limited sustained effects for bystander behaviors related to emotional distress (Santacrose et al., 2020).

Three studies evaluated the effectiveness of an asynchronous, online simulation program on participant preparedness, self-efficacy, and likelihood to intervene using the Gatekeeper Behavior Scale (GBS). All three studies demonstrated significant positive results in these categories (Coleman et al., 2019; Rein et al., 2018; Smith-Millman et al., 2020). Therefore, interaction and role-play were important components of training for maximum effects; however, a simulation component could be a beneficial addition to the training.

Facilitator Models. Eight studies used a trained-facilitator model for implementation, while two studies used an approach with peer-led facilitators. The use of trained facilitators demonstrated a significant improvement in both knowledge and referral to mental health resources; however, the effect on attitudes related to suicide prevention was not routinely measured (McLean & Swanbrow Becker, 2018; Rallis et al., 2018; Reiff et al., 2018). The other five studies demonstrated a significant improvement in knowledge, self-efficacy, and likelihood to intervene with the use of a trained-facilitator model (Hashimoto et al., 2016; Pullen et al., 2016; Samuolis et al., 2020; Shannonhouse et al., 2017; Zinzow et al., 2020).

Two peer-led training programs produced mixed results. Bridges et al. (2018) implemented a peer-to-peer education program to improve depression awareness and suicide prevention, which led to inconsistent results in participants directly and indirectly trained. Tsong et al. (2019) utilized peer-led training, which only demonstrated an increase in knowledge regarding suicide prevention in college students. One study used both trained-expert facilitators and peer facilitators and demonstrated an increase in both

knowledge and attitudes towards suicide prevention (Ross et al., 2021). Therefore, stronger evidence existed amongst all outcomes for the trained-facilitator model, however, a combination facilitator model lacked in the existing research.

Effectiveness of the Implementation of an Evidence-Based Gatekeeper

Training Model. Thirteen of the studies used an evidence-based gatekeeper training model that reflected the steps of bystander intervention, which include (a) identifying a problem, (b) interpreting it as urgent, (c) taking personal responsibility, (d) having confidence in one's knowledge and skill to intervene, and (e) intervening (Latane & Darley, 1970, as cited in Fischer et al., 2011). The studies that used an evidence-based training model concluded that the use of the model was feasible for implementation on a college campus, and six of the studies demonstrated that participants had an improvement in knowledge, self-efficacy, and likelihood to intervene post-intervention (Kuhlman et al., 2017; Pullen et al., 2016; Reiff et al., 2018; Samuolis et al., 2020; Smith-Millman et al., 2020; Zinzow et al., 2020). Alternatively, three studies used a campus-developed, evidence-informed model as the intervention and demonstrated an improvement in knowledge and likelihood to intervene post-intervention (Hill et al., 2020; Ross et al., 2021; Shannonhouse et al., 2017). One study by Muehlenkamp and Hagan (2020) offered a unique perspective without an intervention and found that risk severity and perceived behavior control of students were related to increased likelihood to refer to help.

These findings supported the bystander theory, in that intervention behavior depended on the person's ability to identify a concern, interpret the situation as problematic, and have confidence in their ability to intervene. Therefore, strong evidence

existed to support the use of an evidence-based practice (EBP) training model based on bystander theory that included campus-specific resource education to lead to desired outcomes for the clinical question.

Impacts of Training at Follow-up. The effect of training over time was another common theme. Seven studies evaluated the effect of the bystander training longitudinally, between one to three months, and two additional studies evaluated the effect of training over periods of six to fifteen months. Of these longitudinal studies, five demonstrated a sustained effect on the participants' knowledge, competence, and likelihood to intervene (Bridges et al., 2018; Hashimoto et al., 2016; Reiff et al., 2018; Ross et al., 2021; Santacrose et al., 2020). In contrast, three of the studies discovered that without repeat training, a reduction in knowledge and self-efficacy scores related to suicidal intervention behaviors occurred; however, these follow-up scores were still above baseline measurements (Coleman et al., 2019; Rallis et al., 2018; Zinzow et al., 2020). The results at follow-up from Hill et al. (2020) were deemed inconclusive due to a poor response rate on the follow-up survey; therefore, attrition rates could negatively impact the ability to draw conclusions during a longitudinal study. In conclusion, the presence of sustained effects on outcomes related to knowledge, self-efficacy, and likelihood to intervene were prevalent for participants in most longitudinal studies; however, it was important to consider whether refresher training should be offered to have a lasting effect.

Variation in Concept Definitions and Populations

Some variation in the titles or names of the training programs was found in the evidence. Fifteen studies were self-identified as gatekeeper training. In these studies, gatekeepers were defined as laypersons trained to identify risk factors and warning signs of suicide (Kuhlman et al., 2017). Two studies used the term bystander in their training, which was defined as training that focused on overcoming barriers to helping (Hill et al., 2020). Two studies did not use either term but used unclassified training of individuals to identify and respond to mental health distress.

Fifteen of the studies focused on training as a suicide prevention strategy; however, four studies related to mental health, depression awareness, emotional distress, or self-care were also included in the synthesis (Bridges et al., 2018; Muehlenkamp & Hagan, 2020; Reiff et al., 2018; Santacrose et al., 2020). The focus of these studies on student mental health allowed for the measurement of the identified project outcomes of increased confidence to intervene, discuss, and refer community college students to established mental health resources.

The populations of interest varied throughout the studies. Seventeen studies focused on college students as the population of interest, identifying peers as primary gatekeepers on college campuses. Two studies looked at staff only, and five studies examined effects on students, faculty, and staff as a collective group. The studies including faculty and staff recognized the importance of faculty and staff interactions with students, in addition to peers. One outlier study focused on community members,

which was included in the synthesis because the population was comparable to the community college campus used for this project (Hill et al., 2020).

Strength of the Evidence

The Johns Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool was used to critique and evaluate the quality of the evidence in this synthesis (Dang & Dearholt, 2017). Nineteen studies were reviewed, including five RCTs rated at Level 1B, eight quasi-experimental studies rated at Level 2B, one quasi-experimental study rated at Level 2C, two mixed-method studies rated at Level 3B, two pilot studies rated at Level 5B, and one systematic review rated at Level 3B based on the Johns Hopkins Appraisal Tool (Dang & Dearholt, 2017).

The systematic review and meta-analysis supported the other evidence with its conclusion that gatekeeper/bystander training resulted in improved skills and self-efficacy (Wolitzky-Taylor et al., 2020). Of the nineteen studies included in the synthesis, three noted a small sample size to be a limitation of study results (Coleman et al., 2019; Samuolis et al., 2020; Zinzow et al., 2020); while one study uniquely used a community sample as the population of interest (Hill et al., 2020). Sixteen of the studies used a single-site study design, one study used a multi-site design (Smith Millman et al., 2020), one study used a community sample design (Hill et al., 2020), and then one was a systematic review and used secondary data (Wolitzky-Taylor et al., 2020).

Overall, good and high-quality evidence supported use of the bystander workshop to improve knowledge, self-efficacy, and likelihood of participants to intervene in a mental health situation. Five Level 1B studies were identified based on their use of

randomization; however, they were rated as quality level of B due to the use of a small sample size or sample homogeneity concerns. Of these, four demonstrated training to be effective for increasing gatekeeper knowledge, skills, and self-efficacy and one demonstrated an increase in referrals. Eight Level 2B studies were identified based on their use of an experimental intervention; however, several studies reported risk of selection bias and had small samples. One Level 2C study was identified based on the use of an experimental intervention with unvalidated tools and a risk of selection bias. Of these Level 2 studies, all demonstrated a combination of improved knowledge, skills, and self-efficacy because of training; but they did not measure the number of referrals. Three Level 3B studies were identified as they included both quantitative and qualitative analysis of data and one of these studies was a systematic review. All three of these studies demonstrated an improvement in knowledge, skills, and self-efficacy. One study in this group also demonstrated an increase in referrals. Two Level 5B studies were identified as they were pilot studies and implemented at one site. Both studies resulted in increased utilization of services and referrals in addition to improved knowledge, skills, and attitudes of participants.

In conclusion, all studies supported the use of training for improved knowledge, skills, and self-efficacy of participants. The co-investigators presented multiple models to key stakeholders at the project site; and, with the acceptance of the key stakeholders, the DNP project co-investigators chose the BeVocal model because of its implementation and impact on college campuses. While the BeVocal model was not explicitly named in any of the identified studies, the BeVocal model bystander theory framework was very

similar to the models used in the synthesized studies which trained participants to recognize and respond to mental health concerns using principles of bystander intervention. In conclusion, sufficient evidence was found to support a bystander intervention model, such as the BeVocal model, to improve preparedness, self-efficacy, and the likelihood of participants to intervene and refer students or peers to established internal and external mental health resources.

Overview of the Theoretical Frameworks

The main theoretical framework guiding this DNP project was the Social Cognitive Theory (SCT) by Bandura (2001). The SCT focuses on the dynamic processes between “personal factors, environmental factors, and human behaviors” (National Cancer Institute, 2005, p. 19). An individual’s perceived self-efficacy (confidence), outcome expectancies, goals, and perceived impediments are what drive behavior according to Bandura (as cited in Luszczynska & Schwarzer, 2005). This framework guided the intervention by focusing on improving an individual’s self-efficacy and confidence in being able to assess, respond, and act upon interacting with a person with a mental health concern. All participants, whether faculty, staff, or students, were to gain this knowledge and skill acquisition through the implementation of the BeVocal model, which includes a bystander intervention workshop and informational postcard.

Another theoretical framework guiding this project was the Bystander Effect Theory. Bystander effect refers to the premise that an individual is less likely to assist in a dire situation when passive bystanders are observing. Latané and Darley (1970) proposed a five-step psychological model related to the bystander effect including that

the “bystander needs to (a) notice a critical situation, (b) construe the situation as an emergency, (c) develop a feeling of personal responsibility, (d) believe that he or she has the skills necessary to succeed, and to reach a conscious decision to help” (Fischer et al., 2011, p. 518). This framework guided the intervention by providing steps for being an effective bystander. The BeVocal model was built based on the Bystander Effect Theory as a framework that targeted both internal and external barriers to intervening when presented with a mental health concern. In the BeVocal workshop, participants used the structure of a culture of harm and community of care to identify situations where an individual was experiencing a mental health concern and to utilize campus resources to intervene effectively. Participants learned that there was no right or wrong way to intervene, and by participating as an active bystander that they were standing up for the individual experiencing the harm and promoting a healthy campus community. The overall goal of the BeVocal model was for participants to feel confident to use bystander effect steps to identify students experiencing a mental health concern and refer them to appropriate and available on- or off-campus resources.

Concept Definitions

In SCT, self-efficacy is a central concept; therefore, unless someone believes they can be successful and their actions will make a difference, they are unlikely to act or persevere through any barriers (Bandura, 2001). Another key concept is behavioral capability which implies that a person’s capability to perform a behavior is impacted by their knowledge and skills (Bandura, 2001). Therefore, a person must have the knowledge, skills, and self-efficacy or confidence to successfully complete a behavior.

Confidence can be identified as outcomes including participant self-rating of self-efficacy, preparedness, and likelihood to intervene which has been measured using the Gatekeeper Behavior Scale (GBS) (Albright et al., 2016). For the purposes of this DNP project, self-efficacy was defined by the co-investigators as a person's confidence in their ability to intervene in a mental health situation. Self-efficacy is measured as a subset of the GBS. Knowledge and skills are also measured through a separate subset of the GBS, which is focused on preparedness. Preparedness was defined by the co-investigators as a person's ability to recognize psychological distress, discuss the concern, and refer the person to the appropriate resources.

Evidence-Based Practice (EBP) Model

The EBP model used for this project was the Iowa Model. This model consists of a systematic, multi-step process for identifying a problem, forming a team, appraising the literature, creating and implementing a pilot project, and sustaining a practice change (Buckwalter et al., 2017). The co-investigators of this project met with key stakeholders at the college regarding their concerns for student mental health, locally and nationally, related to the COVID-19 pandemic. After meeting with the stakeholders, the co-investigators learned of the resources available on- and off-campus at the college site, and the current underutilization of these resources. Therefore, this project was created based on an identified need at a suburban community college, regarding student mental health decline during the recent COVID-19 pandemic. The co-investigators of this project then formed a team in collaboration with the suburban community college agency and collaborated with key stakeholders to implement an evidence-based pilot project in Fall

2021. The co-investigators appraised the literature regarding bystander intervention workshops used for college students and their impact on participants' confidence level in bystander intervention, as well as the utilization of available resources. After analyzing the literature, the BeVocal model was chosen for this project with support from the key stakeholders at the project site. The Iowa model was best for this project due to its framework of analyzing the literature to implement an evidence-based bystander model as a pilot project to lead to a sustained change.

Project Design

Methodology

Based on synthesis of the evidence, the BeVocal model was selected for implementation. The model consisted of an interactive bystander workshop and informational postcard based on three steps of the bystander theory: recognizing harm, choosing to respond, and taking action. The BeVocal model has been implemented on college campuses and demonstrated an increase in participant bystander behavior, an enhanced sense of collective responsibility, and an increase in knowledge of the steps of bystander theory (The Bystander Intervention Initiative of the University of Texas at Austin, n.d.). The BeVocal model was modified to include college resources specific to the project implementation site.

The DNP pilot project utilized convenience sampling in a suburban community college to implement the BeVocal model aimed toward improving participants' confidence, knowledge, and ability to recognize and assist students in need to utilize mental health resources. The BeVocal model was implemented from September through

December 2021. Seven one-hour workshops were held for faculty/staff and nine one-hour workshops were held for students to give multiple opportunities for participation. The co-investigators participated in BeVocal model training during the Summer of 2021 and then facilitated the workshops.

Participants

This DNP project used a two-pronged approach, focusing on separate populations: students and faculty/staff members, because each plays an important role in the referral and use of mental health services by students. Convenience samples of students and faculty/staff were recruited for this project as those interested voluntarily registered for the workshop offerings via an online registration platform without any necessary obligation to participate. Students were eligible to participate in the student-focused bystander workshop if they were an actively enrolled student, 18 years old or older, able to understand and speak the English language, and had Internet access to attend the virtual workshop. Faculty and staff were eligible to register for the faculty-focused workshop offerings if they were actively employed at the college, 18 years old or older, able to understand and speak the English language, and had Internet access to attend the virtual workshop.

The workshop offerings were advertised to students through the Office of Student Life student wellness events page, the college's social media sites, informal informational sessions with campus faculty/staff, and a recruitment e-mail. The workshop offerings were advertised to faculty/staff through the Center for Excellence in Teaching and Learning (CETL), weekly college newsletter, internal social media sites, informal

informational sessions with campus faculty/staff, and a recruitment e-mail. These recruitment tactics were identified and used to increase participation and are related to the snowball sampling effect.

An online link was provided for students and faculty/staff to register for their respective workshop. The registration link provided a comprehensive overview of the bystander workshop, including the workshop objectives; information on what was to be expected as a participant, time commitment required as part of participation; potential risks; and the project co-investigators contact information if the prospective participant had questions or concerns. Upon registration, registrants were asked to sign an informed consent before participating in the workshop (Appendix C).

Setting

This DNP project was implemented in a suburban, community college in Maryland. This community college offers over 80 degree and certificate programs, to help people achieve their dreams as well as support the community. With current restrictions due to COVID-19 limiting on-campus activities, the BeVocal workshops were held virtually. Therefore, participants accessed the live workshops using Zoom videoconferencing software from their computer via an Internet connection.

Tools

The Gatekeeper Behavior Scale (GBS) was selected to measure the effectiveness of the bystander workshop and postcard. This 11-item scale has demonstrated high internal consistency and has established validity for measuring the impact of online gatekeeper training (Albright et al., 2016). The scale has three subscales including

preparedness to intervene, likelihood to intervene, and self-efficacy that participants use to rate their gatekeeper behaviors on a Likert scale (Albright et al., 2016; Appendix D). The GBS is available for non-commercial use at no cost and was used to collect data pre- and post-attendance of the workshops. The GBS tool was available for completion before participants logged on to the videoconferencing platform for the live workshop, and then again immediately following the workshop. The pre-and post-implementation scores were gathered and analyzed to determine if the workshop had led to the desired outcome of an improvement in participants' self-ratings in preparedness, self-efficacy, and the likelihood of participants to intervene and refer students to established internal and external mental health resources.

Utilization rates of both on-campus and community health resources by students were measured pre-and post-implementation of the BeVocal workshop. Resource utilization data was acquired from Student Assistance Program (SAP) quarterly reports as well as from the Student Intervention Department and provided in aggregate without any personally identifiable information.

Intervention

The BeVocal model was the EBP intervention selected, which included the implementation of bystander intervention workshops and the distribution of an informational postcard. Two separate types of bystander workshops were offered, one for students and one for faculty/staff. The workshops were one hour long and included interactive scenarios and discussions about mental health issues, bystander intervention barriers and techniques, and discussion about college resources. The two workshop

formats were similar but differed slightly. The student workshops included scenarios focused on peer-to-peer interaction and messaging about student accessible campus resources. The faculty and staff workshops included scenarios focused on faculty/staff-to-student interactions and a discussion about faculty and staff accessible campus resources.

After completion of the workshop, participants received an informational postcard that included the steps of bystander intervention, as well as the on- and off-campus resource contact information (Appendix E). The postcard concept was the second component of the BeVocal model and was modified to include this college campus' resources. The postcard was reviewed and approved by the members of the implementation team.

Data Collection Procedures

To measure the effectiveness of the BeVocal model on participant confidence and ultimately mental health resource utilization, various data were collected. Upon registration, participants were asked to complete an electronic, anonymous demographic questionnaire. Student participants were asked their gender, race/ethnicity, age group, and program of study. Faculty and staff participants were asked their gender, race/ethnicity, role at the college, and academic division. Collecting this demographic data facilitated analysis regarding the effectiveness of the workshop in different population groups.

The confidence of participants to intervene when faced with a student mental health concern was measured using the Gatekeeper Behavior Scale (GBS), which measures contributing factors such as preparedness, self-efficacy, and likelihood to intervene. All participants were asked to complete an anonymous, electronic version of the GBS before and after the workshop session for data analysis. The completion of the

GBS tool was voluntary and the participant's privacy was maintained using an anonymous survey link. While attending the workshop, participants had the opportunity to self-identify; however, the names of the participants were not shared outside of the workshop with anyone except the co-investigators. During the data collection phase, the data was aggregated by participant group (i.e., faculty/staff, student) to compare during analysis.

To examine changes in the utilization of mental health resources on campus, the co-investigators requested data regarding the number of student referrals from reports generated by the Student Intervention Team and the SAP. The reports pre-implementation from April 1, 2021, to August 1, 2021, were compared to student referral rates post-implementation from September 1, 2021, to January 1, 2022.

Organizational System Analysis

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) Analysis was performed based on the co-investigators' collaboration with the project site (Appendix F). The SWOT approach was used to maximize strengths and opportunities while minimizing threats and preparing for weaknesses. As an organization, an internal strength of this community college was the vast mental health resources for students and faculty/staff. The college offered Student Life Wellness activities, on-campus and virtual counseling sessions, a student assistance program to assist in long-term referrals to appropriate mental health resources, a student intervention team for immediate support, and access to a 24/7 crisis hotline. The college also offered resources for faculty and staff including an established Center for Excellence for Teaching and Learning (CETL)

program for professional development, access to virtual conferencing software, an established process for reporting behavioral concerns, and an Employee Assistance Program (EAP).

Internal weaknesses for this college community included limited on-site counseling services, lack of a comprehensive health center on campus, and no direct partnership with community mental health resources. The lack of immediate face-to-face support limited the “just-in-time” support students could receive from the campus community (Liu et al., 2020). Another weakness was the lack of clarity regarding when to use the behavioral concern form to report a concern to the Student Intervention Team; therefore, the forms were being underutilized.

In addition to the internal strengths and weaknesses of this community college, external opportunities and threats were also acknowledged. An opportunity identified was the use of the partnership with the SAP to increase the on-campus presence of counseling services for student ease of access and to develop direct partnerships with local mental health community resources, such as with the local crisis center. The analysis revealed a demonstrated interest in supporting student mental health by faculty/staff that should be embraced to create a positive change in the ability to recognize student mental health concerns and the utilization of mental health resources. External threats were factors outside of the college’s control that could have impeded the implementation of the BeVocal model on campus. The continued restriction to on-campus access due to COVID-19 made it challenging to recruit participants for the workshops. Another potential external threat was related to the stigma surrounding receiving mental health

support and the increased responsibility of members of the campus community in having to learn the bystander intervention steps.

The main threat that needed to be considered was whether the BeVocal model could be sustained and facilitated post-implementation. The sustainability of this project after implementation will be influenced by the strengths and opportunities noted in the SWOT analysis. The heightened awareness and interest of student mental health by the college administration as a priority supported the implementation of this project past the pilot phase. Individuals who have increased interest in the project will be organically identified as team members to continue the BeVocal model in the future. In addition, the development of an implementation team used to advise and guide the project will promote the success of the program over time, as there will be buy-in from this group. After initial data analysis of the outcomes related to participant confidence and mental health resource utilization, positive results would encourage leadership to support the sustainment of the identified EBP intervention at the community college.

Implementation Timeline

The planned implementation of this DNP project was outlined in a timeline using the Iowa model as a framework (Appendix G). After obtaining institutional review board (IRB) approval from Salisbury University in June 2021 (Appendix H) and the project site in July 2021 (Appendix I), the project began the pre-implementation phase. During this time, the co-investigators met with key stakeholders of the college, including the Analytics and Planning Coordinator, the Behavioral Health Services (BHS) Representative and Coordinator for Student Conduct and Intervention, the Student

Wellness Specialist, the Director of CETL, Title IX coordinator, and Associate Vice President for Student Development, to form an implementation team; determined dates of co-investigator training; planned for advertisement of the workshops; planned for the implementation of electronic registration, survey, and consent forms; completed facilitator training; and finalized the development of the workshops.

The implementation phase of the project was from September through December 2021. During this time, seven BeVocal workshops were offered for faculty/staff, and nine BeVocal workshops were offered for students. To encourage participation in the workshops by both the student and faculty/staff populations, workshops were advertised throughout the implementation period. Advertisement strategies included recruitment e-mails, college newsletters, internal college websites, and informal word-of-mouth communication. The co-investigators added an additional two workshops for the student population cohort per request from two student organizations on-campus. The addition of these two workshops increased the total number of workshop offerings for students from seven to nine. After December 2021, the project was in the post-implementation phase and data analysis and evaluation was performed.

Project Implementation

The BeVocal model was implemented using training workshops and the distribution of a postcard resource. Participants used the organization's pre-established processes to register for the BeVocal workshops. Students registered for the student-centered workshops using an events application and faculty and staff registered for the faculty/staff-centered workshops through the employee training calendar. Once

registration was completed, participants were e-mailed the informed consent, the pre-workshop survey which included the GBS (Appendix D) and the demographic questionnaire (Appendix J), and the Zoom link to attend the workshop. All participants completed the informed consent and the pre-workshop survey prior to attending the workshop.

The BeVocal workshops were one-hour virtual sessions facilitated using a PowerPoint presentation, poll questions, and open discussions about mental health scenarios. Participants could participate verbally or by using the chat function within the Zoom platform and were given the option to turn off their video feed if they preferred. The facilitator remained on camera throughout the session to encourage active participation. Per the request of the project site, the co-investigators offered two additional workshops sponsored by student organizations which resulted in nine total student workshop offerings. The sample size for the workshops was smaller than originally anticipated, as six of the nine student workshops and two of the seven faculty/staff workshops had no attendees.

After the workshop, participants were provided with the BeVocal postcard resource to reinforce the BeVocal model. Participants were also asked to complete the post-workshop demographic and GBS survey.

Summative Evaluation of Project Implementation

Barriers and Facilitators

Several barriers and facilitators were faced during the implementation of the BeVocal model that risked impacting the results of the DNP project. These factors are

reviewed regarding their impact on implementation, outcomes, and sustainability of the EBP intervention.

Barriers. The barriers experienced during implementation were primarily related to recruitment challenges. The co-investigators hypothesized several reasons for the recruitment challenges including mental health stigma, use of a virtual platform, ethical limitations in place to protect participants, competing priorities for participants and the organization, and the ongoing effects of the COVID-19 pandemic.

Mental health stigma has reportedly played a role in the lack of individuals with mental health concerns receiving treatment. According to the National Institute of Mental Health (2016), the stigma surrounding mental health is cited as the main reason that 56% of adults with a mental illness do not receive mental health treatment (as cited in Holder et al., 2019). This stigma could have affected the willingness of potential participants to register for the workshops focused on bystander intervention related to mental health concerns.

The use of a virtual platform to run the workshops could have been another reason for recruitment challenges. Potential participants may have preferred to attend in-person workshops and therefore chose not to register for the virtual workshop. The use of the virtual platform also limited the ability of the co-investigators to ensure that participants completed the pre-and post-workshop surveys, which resulted in fewer surveys being completed than the number of attendees.

The ethical limitations in place to protect the rights of participants during the pilot phase may have led to recruitment challenges. The workshops were offered without

targeting certain populations to maintain ethical standards. Therefore, the co-investigators could not offer the workshops as part of regularly scheduled class sessions or at faculty/staff division meetings. The co-investigators also could not offer incentives for attendance including food, extra credit for students, or payment; therefore, attendance was strictly on a voluntary basis. In a study by Stewart et al. (2018), researchers surveyed state mental health directors from 44 states to assess the benefit of using incentives to increase participation in Evidence-Based Practice (EBP) projects and almost three-quarters of the directors endorsed using at least one financial incentive to increase participation. Therefore, the lack of incentives may have resulted in fewer participants.

Key stakeholders noted a decrease in the registration of faculty/staff and students in all workshops at the project site during the implementation period. Therefore, competing priorities such as other scheduled meetings, pressure felt by faculty/staff if left short-staffed, and email fatigue from the numerous offerings could have impacted participant attendance at the workshops. The continued impact of the COVID-19 pandemic also affected the recruitment efforts. Faculty/staff were still adjusting to post-pandemic instructional differences which left little time for their engagement in extracurricular workshops, and students were adjusting to post-pandemic coursework and continued pressures of competing personal and professional priorities.

Facilitators. Several facilitators during the implementation period of the EBP intervention included the use of the Iowa model of EBP, use of the Social Cognitive Theory (SCT) framework, integration of user feedback, and use of DNP skills.

Iowa Model of EBP. The topic selected was based on a health need that was confounded by current events and inadequate access to care, which disproportionately affected marginalized populations. This selection was consistent with the Iowa model, which provides that a problem-focused trigger may be based on internal benchmarking and external data related to the phenomenon of interest (Titler et al., 2001). After selecting a topic, the next key decision in the Iowa model was to identify if the topic was a priority within the organization (Titler et al., 2001). The co-investigators completed a needs assessment using informal interviews with organizational leaders and key staff members who were determined by the co-investigators to be best prepared to answer the questions (Moran et al., 2020). As a result, college student mental health was determined to be an organizational priority, due to its immediate threat to the wellness of students and the downstream effects on college enrollment and retention. The organization's readiness to seek a solution to this population health issue was another facilitator for success. The leadership and implementation team supported this project by participating in and communicating about the workshops through informal communication methods, as well as using emails and newsletters. This support enhanced buy-in and reduced organizational resistance to change.

SCT Framework. Using the SCT as a theoretical framework supported the implementation with its focus on the relationships between personal factors, environmental factors, and human behavior (National Cancer Institute, 2005). Several environmental changes within the organization supported the goals of the project. For example, the reporting form for mental health concerns changed names from the

Concerning Behavior Report to the Cares Referral Form, which reflects a campus culture change to reduce mental health stigma. In addition, a section of the college Intranet was dedicated to student support services, allowing for easier access to college resources. Student access to mental health services was also improved with the college formalizing a partnership with a local crisis center and offering face-to-face counseling sessions. These environmental changes outside of the scope of the project supported its implementation.

User Feedback. Formative feedback was gathered from the participants, institutional leaders, and members of the implementation team throughout the implementation period. Participant engagement during the workshops was demonstrated using poll questions and group discussions. Several participants also offered to support the project's continuation past the pilot phase. The implementation team and institutional leadership demonstrated support for the project by recommending that the co-investigators seek grant funding to sustain the BeVocal model at the project site which was obtained. Recommendations for improvement from key stakeholders included conducting the workshops in person during scheduled class sessions, division meetings, and orientation sessions, as well as for specific groups, such as adjunct faculty.

DNP Skills. A key role for the DNP nurse was to lead the change within the organization through assessing organizational readiness and managing resistance to change (Moran et al., 2020). During the planning phase of the project, the co-investigators followed the Iowa model of EBP and involved key stakeholders in the process of identifying the topic and choosing the evidence-based bystander intervention

model, which helped to enhance buy-in and reduce resistance to change (Titler et al., 2001). Another role of the DNP nurse is to identify factors that impact access to care and evaluate evidence to determine potential interventions (Moran et al., 2020). The project co-investigators led the change within the organization using DNP skills, such as interdisciplinary collaboration and utilization of the EBP framework (Melynk & Fineout-Overholt, 2019).

By involving influential stakeholders early and often throughout the process, the co-investigators were able to gather formative feedback, such as the best times to offer workshops. The co-investigators also included subject matter experts with supporting roles on campus in the planning and implementation phases to encourage their engagement. As the implementation progressed, a key function of the DNP nurse was to articulate the purpose of the project in relation to the benefits to the organization (Moran et al., 2020). Leading the organizational change involved answering frequent questions and asking for support to assist with challenges. For example, when registration was below the target, the co-investigators asked for support and suggestions for recruitment. These actions demonstrated the continuous formative evaluation process, reflection, and adaptation to the organization's readiness (Moran et al., 2020).

Sustainability

Continuing the project past the implementation phase required the co-investigators to assess its sustainability. Sustaining the project would be feasible with a staff member charged with coordinating, leading, and teaching the workshops. Financial considerations for sustainment include a budget to pay for the lead staff member,

marketing costs, and cost of provided incentives for attendance. If participants such as adjunct faculty were to be paid for their time in the workshop, this cost would need to be reflected in the budget as well. Fortunately, one of the co-investigators was able to participate in a county competition approved by the organization which led to receipt of a \$25,000 grant that will support the program's budget for one year after implementation. During the implementation period, the organization capitalized on an opportunity to partner with the local family crisis center and changed the Concerning Behavior Report to the Cares Referral Form. These actions enhanced the project's sustainability by reducing stigma surrounding mental health and improving access to on campus and community mental health resources (The Bystander Intervention Initiative at the University of Texas at Austin, n.d.).

The BeVocal model supported the organization's mission since the intervention inspires all members of the campus to be part of a community of care by participating in bystander intervention, which supports the health and wellbeing of all members of the organization. The organization's mission includes serving students and the community through supporting growth, inspiration, achievement, and contributions of the organizational members. The BeVocal model could promote college student enrollment, retention, and the organizational mission through supporting student mental health.

Analysis and Discussion of Findings

Demographic Data Analysis

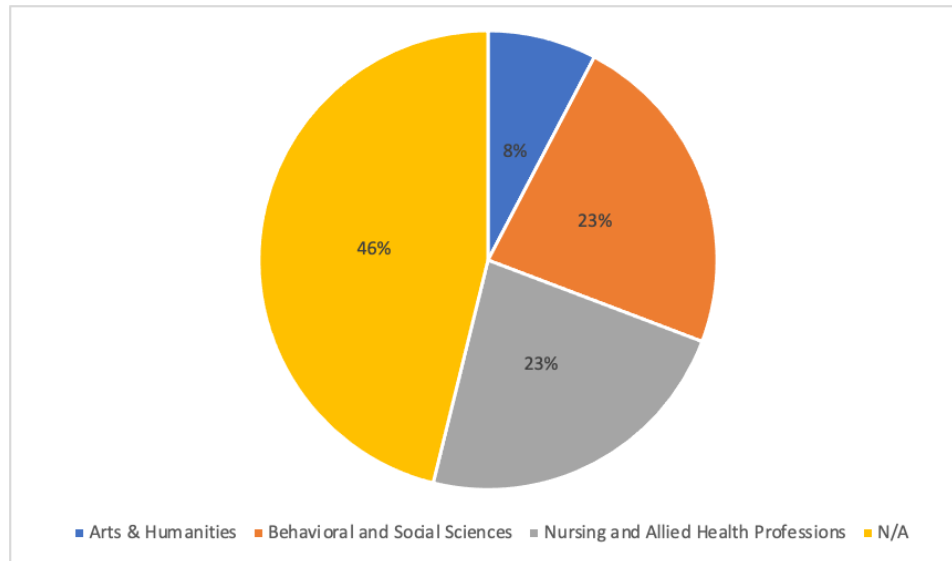
Demographic characteristics of the pre- and post-samples of student and faculty/staff populations were analyzed separately using descriptive statistics. Analysis of

these demographic characteristics allowed the co-investigators to determine if the sample was representative of the overall population of the institution.

The post-workshop sample of the faculty/staff population ($n=26$) consisted of 92.3% White ($n=24$) and 96.15% female ($n=25$) participants, which was representative of the overall population of the college; with 81.7% of the college faculty/staff being White ($n=679$), and 61% of the college faculty being female ($n=63$). The sample also included 92.3% full-time employees ($n=24$) and did not include any adjunct faculty, which is not a representative sample of the large proportion of adjunct faculty employed by the college, which is 47% percent of the total faculty ($n=186$). The lack of adjunct faculty participation could be attributed to the inability to pay these participants to participate during their non-working hours. Academic divisions most represented included Nursing and Allied Health Professions (23.08%, $n=6$) and Behavioral and Social Sciences (23.08%, $n=6$), which was expected based on the mental health focus of the workshops. A large percentage, 46.15% ($n=12$) of the faculty/staff sample rated non-applicable under the academic division category, which was expected as many staff members do not fall under an academic division. There was no representation from the Science, Technology, Engineering and Math division. Data for these demographic categories are presented in Table 1. When comparing the pre- and post-faculty/staff workshop survey responses, there was a sample attrition rate of 36.5% ($n=15$), which demonstrated that there may be barriers for faculty and staff to attend workshops for which they had registered.

Table 1*Faculty/Staff Demographics*

Variable	Category	Pre-Workshop (41) Percentage (n)	Post-Workshop (26) Percentage (n)
Gender	Male	24.39% (10)	3.85% (1)
	Female	75.61% (31)	96.15% (25)
	Total	100% (41)	100% (26)
Ethnicity/Race	White	92.68% (38)	92.30% (24)
	Black	2.44% (1)	3.85% (1)
	American Indian	0% (0)	0% (0)
	Asian	0% (0)	0% (0)
	Pacific Islander	0% (0)	0% (0)
	Two or more	2.44% (1)	3.85% (1)
	Choose Not to Disclose	2.44% (1)	0% (0)
	Other	0% (0)	0% (0)
	Total	100% (41)	100% (26)
Role	Part Time Staff	7.32% (3)	7.69% (2)
	Adjunct Faculty	2.44% (1)	0% (0)
	Full Time Staff	58.54% (24)	46.15% (12)
	Full Time Faculty	31.71% (13)	46.15% (12)
	Total	100% (41)	100% (26)
Academic Division	N/A	29.27% (12)	46.15% (12)
	Arts & Humanities	29.27% (12)	7.69% (2)
	Behavior and Social Sciences	14.63% (6)	23.08% (6)
	Community Education, Business, & Applied Technology	4.88% (2)	0% (0)
	Nursing and Allied Health Professions	21.95% (9)	23.08% (6)
	Science, Technology, Engineering & Math	0% (0)	0% (0)
	Total	100% (41)	100% (26)

Figure 1*Academic Division of Faculty and Staff*

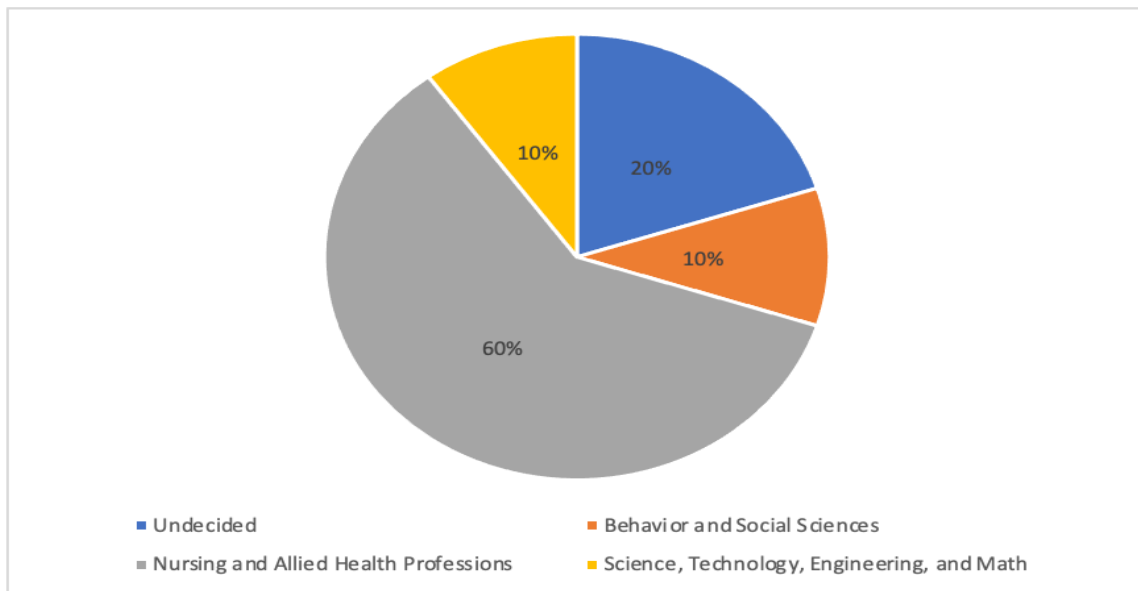
The demographic characteristics of the student pre- and post-workshop samples were also analyzed with descriptive statistics. Analysis of this data demonstrated a post-workshop sample comparable to the general college population in terms of ethnicity. The post-workshop student sample included 60% White students ($n=6$), 10% Black students ($n=1$), and 20% of students with two or more races/ethnicities ($n=2$). This is compared to the college's student population being 67.7% White ($n=3,111$), 16.54% Black ($n=760$), and 4.05% of students with two or more races/ethnicities ($n=186$). The age group demographics included 40% aged 18-24 ($n=4$), 10% aged 25-34 ($n=1$), and 50% aged 35-44 ($n=5$). Males were underrepresented in the sample, with only 10% of the post-workshop sample being male ($n=1$). While there were 1,857 male students enrolled in the college (40.4%) compared to 2,739 female students (67.7%), the proportion was not the same. Students from the Nursing and Allied Health division were represented most with

60% of the sample size ($n=6$), which was expected based on having a workshop sponsored by a nursing student organization. Recruitment challenges for the student workshops led to a small, homogenous sample in terms of gender and academic division. Data for these demographic categories are presented in Table 2. The student demographic data showed an attrition rate of 9% ($n=1$), which was much lower than the faculty/staff population group.

Table 2*Student Demographics*

Variable	Category	Pre-Workshop (11) Percentage (n)	Post-Workshop (10) Percentage (n)
Gender	Male	9.09% (1)	10% (1)
	Female	90.91% (10)	90% (9)
	Total	100% (11)	100% (10)
Ethnicity/Race	White	63.63% (7)	60% (6)
	Black	9.09% (1)	10% (1)
	American Indian	0% (0)	0% (0)
	Asian	0% (0)	0% (0)
	Pacific Islander	0% (0)	0% (0)
	Two or more	18.18% (2)	20% (2)
	Choose Not to Disclose	0% (0)	0% (0)
	Other	9.09% (1)	10% (1)
	Total	100% (11)	100% (10)
Age	18-24	36.36% (4)	40% (4)
	25-34	18.19% (2)	10% (1)
	35-44	45.45% (5)	50% (5)
	45 and up	0% (0)	0% (0)
	Total	100% (11)	100% (10)
Academic Division	Gen Ed/Undecided	18.18% (2)	20% (2)
	Arts & Humanities	0% (0)	0% (0)
	Behavior and Social Sciences	18.18% (2)	10% (1)
	Community Education, Business, & Applied Technology	0% (0)	0% (0)

Nursing and Allied Health Professions	54.55% (6)	60% (6)
Science, Technology, Engineering & Math	9.09% (1)	10% (1)
Total	100% (11)	100% (10)

Figure 2*Academic Division of Students***Outcomes Analysis of the Intervention**

The purpose of this EBP implementation project was to increase the confidence of college students, faculty, and staff to recognize mental health concerns and to refer students to established organizational resources after attending a bystander intervention workshop based on the BeVocal model. Increasing participants' confidence and likelihood to act was expected to increase the utilization of mental health resources by students in need, thus improving overall mental health of the college student population.

Effect on Participants

Descriptive statistics including mean, standard deviation, mode, and range were analyzed for each question's responses on the GBS in both the pre-workshop and post-workshop surveys, and they are presented in Table 3. Analysis was done with both population groups combined as well as separated by population group to enable a comparison between population groups. On the GBS, preparedness was evaluated using questions one through five, likelihood to intervene was evaluated using questions six and seven, and self-efficacy was evaluated using questions eight through eleven.

Scores increased for every question for both population groups on the post-workshop survey. The preparedness category mean scores increased from 3.67 to 4.27 for the student population pre-workshop ($n=11$) to post-workshop ($n=10$). Compared to the faculty/staff population mean scores which increased from 3.37 to 4.13 for the pre-workshop ($n=41$) to the post-workshop ($n=26$) for the preparedness category. Therefore, there was a 16.35% increase in mean scores for the student population and a 22.55% increase in mean scores for the faculty/staff population for the preparedness category of the GBS when comparing the pre-workshop mean scores to the post-workshop mean scores.

The likelihood to intervene category mean scores increased from 3 to 3.55 for the student population pre-workshop ($n=11$) to post-workshop ($n=10$). Compared to the faculty/staff population mean scores which increased from 3.195 to 3.54 for the pre-workshop ($n=41$) to the post-workshop ($n=26$) for the likelihood to intervene category. Therefore, there was a 18.33% increase in mean scores for the student population and a

10.8% increase in mean scores for the faculty/staff population for the likelihood to intervene category of the GBS when comparing the pre-workshop mean scores to the post-workshop mean scores.

The self-efficacy mean scores increased from 2.659 to 3.35 for the student population pre-workshop ($n=11$) to the post-workshop ($n=10$). Compared to the faculty/staff population mean scores which increased from 2.83 to 3.45 for the pre-workshop ($n=41$) to the post-workshop ($n=26$) for the self-efficacy category. Therefore, there was a 25.99% increase in mean scores for the student population and a 21.91% increase in mean scores for the faculty/staff population for the self-efficacy category of the GBS when comparing the pre-workshop mean scores to the post-workshop mean scores. Therefore, there was an improvement in scores amongst all categories for both populations which can be seen in Table 3.

Table 3

Descriptive Statistics for GBS Outcomes

GBS Scale Question	Measures	Students		Faculty/Staff		Combined Populations	
		Pre	Post	Pre	Post	Pre	Post
1	Mean	3.18	4.30	3.51	4.15	3.44	4.19
	(SD)	(1.168)	(0.949)	(0.746)	(0.613)	(0.850)	(0.710)
	Median	3	5	3	4	3	4
	Range	1-5	3-5	2-5	3-5	1-5	3-5
	Mode	3	5	3	4	3	4
2	Mean	2.64	4.10	3.10	4.04	3.00	4.06
	(SD)	(0.924)	(0.994)	(0.871)	(0.662)	(0.894)	(0.754)
	Median	3	4.50	3	4	3	4
	Range	1-4	3-5	2-5	3-5	1-5	3-5
	Mode	2	5	3	4	3	4
3	Mean	2.64	4.30	3.05	4.04	2.96	4.11
	(SD)	(1.206)	(1.059)	(0.865)	(0.599)	(0.949)	(0.747)

4	Median	3	5	3	4	3	4
	Range	1-5	2-5	1-5	3-5	1-5	2-5
	Mode	3	5	3	4	3	4
	Mean	3.36	4.40	3.51	4.12	3.48	4.20
	(SD)	(1.433)	(0.843)	(0.952)	(0.600)	(1.260)	(0.677)
5	Median	4	5	4	4	4	4
	Range	1-5	3-5	2-5	3-5	1-5	3-5
	Mode	2	5	4	4	5	4
	Mean	2.91	4.50	3.63	4.36	3.48	4.39
	(SD)	(1.300)	(0.756)	(1.220)	(0.638)	(1.260)	(0.659)
6	Median	3	5	4	4	4	4.50
	Range	1-5	3-5	1-5	3-5	1-5	3-5
	Mode	3	5	5	4	5	5
	Mean	2.82	3.40	3.15	3.50	3.08	3.47
	(SD)	(0.751)	(0.699)	(0.615)	(0.510)	(0.652)	(0.560)
7	Median	3	3.5	3	3.5	3	4
	Range	2-4	2-4	2-4	3-4	2-4	2-4
	Mode	3	4	3	3	3	4
	Mean	3.18	3.70	3.24	3.58	3.23	3.62
	(SD)	(0.982)	(0.483)	(0.799)	(0.504)	(0.831)	(0.493)
8	Median	3	4	3	4	3	4
	Range	1-4	3-4	1-4	3-4	1-4	3-4
	Mode	4	4	4	4	4	4
	Mean	2.64	3.30	2.76	3.31	2.73	3.31
	(SD)	(0.924)	(0.949)	(0.699)	(0.471)	(0.744)	(0.624)
9	Median	3	3.5	3	3	3	3
	Range	1-4	1-4	2-4	3-4	1-4	1-4
	Mode	2	4	3	3	3	3
	Mean	2.55	3.40	2.95	3.54	2.87	3.50
	(SD)	(0.820)	(0.966)	(0.631)	(0.508)	(0.687)	(0.655)
10	Median	3	4	3	4	3	4
	Range	1-4	1-4	2-4	3-4	1-4	1-4
	Mode	3	4	3	4	3	4
	Mean	2.73	3.30	2.90	3.56	2.87	3.49
	(SD)	(1.009)	(0.949)	(0.625)	(0.507)	(0.715)	(0.658)
11	Median	3	3.5	3	4	3	4
	Range	1-4	1-4	1-4	3-4	1-4	1-4
	Mode	2	4	3	4	3	4
	Mean	2.73	3.40	2.66	3.44	2.67	3.43
	(SD)	(1.104)	(0.966)	(0.728)	(0.651)	(0.810)	(0.739)
	Median	3	4	3	4	3	4
	Range	1-4	1-4	1-4	2-4	1-4	1-4
	Mode	3	4	3	4	3	4

The independent samples t-test was used to compare the pre- and post-workshop survey results between the student and faculty/staff samples. Using the mean response for each GBS category, the analysis demonstrated no significant difference between the student and faculty/staff samples in the scores for preparedness in the pre-workshop survey ($p=0.34$) and the post-workshop survey ($p=0.326$), likelihood to act in the pre-workshop survey ($p=0.192$) and the post-workshop survey ($p=0.457$), or self-efficacy in the pre-workshop survey ($p=0.272$) and the post-workshop survey ($p=0.374$). Therefore, there was no difference between the samples when comparing the pre- and post-workshop ratings of preparedness, likelihood to intervene, and self-efficacy. The inferential analysis of this pre-and post-workshop data is presented in Table 4.

Table 4

Independent Sample t-Test Pre- versus Post-Workshop for Both Populations

GBS Question Category	Position	<i>n</i>		Mean (SD)		Levene's Test for Equality of Variance s (Significance)		T (df)		Significance (One-sided p)	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Preparedness Question Mean	Students	11	10	3.67 (2.33)	4.27 (0.87)	7.31 (0.019)	6.03 (0.019)	0.42 (10.56)	0.46 (11.50)	0.34 (4)	0.326 (6)
	Faculty/Staff	41	26	3.37 (0.75)	4.13 (0.52)						

Likelihood Question Mean	Students	11	10	3 (0.77)	3.55 (0.49 7)	0.0 67 (0.	0.0 52 (0.8	- 0.8 78 (50	0.06 3 (34)	0.1 92	0.47 5
	Faculty/ Staff	41	26	3.195 (0.62)	3.54 (0.48 8)	79 7)	2))				
Self- Efficacy Question Mean	Students	11	10	2.659 (0.86 1)	3.35 (0.94)	5.3 5 (0.	4.2 4 (0.0	- 0.6 23 (12	- 0.32 9 (10.	0.2 72	0.37 4
	Faculty/ Staff	41	26	2.83 (0.55)	3.45(0.46)	02 5)	47))	.27)			

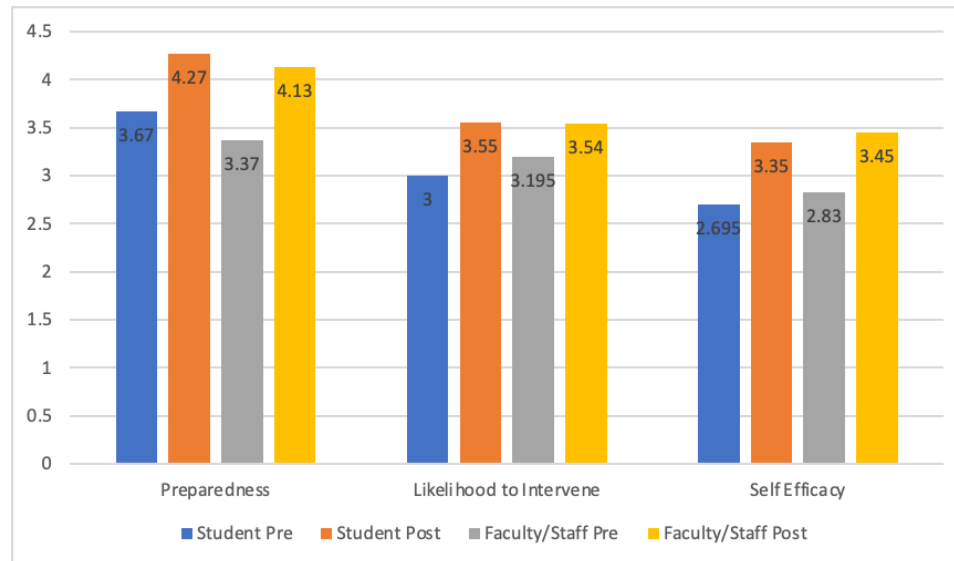
To assess the impact of the workshop on the participant's self-rating of confidence, likelihood to intervene, and self-efficacy, an independent t-test was completed using the means of the individual participants' responses per category on the pre- and post-workshop surveys with both populations combined (see Table 5). There was statistically significant improvement in all three categories: with preparedness ($p < 0.001$) and self-efficacy ($p < 0.001$) slightly more significant than likelihood to intervene ($p = 0.002$). Because ordinal data from the Likert scale was used on the GBS tool, a Mann-Whitney U test was completed to confirm the results of the independent t-test. The results of the Mann-Whitney U test showed similar results for preparedness ($p < 0.001$), likelihood to intervene ($p = 0.006$), and self-efficacy ($p < 0.001$). (See Table 6). Therefore, attendance of the BeVocal bystander intervention workshop significantly improved participants' rating of preparedness, self-efficacy, and likelihood to intervene when encountering a student with a mental health concern.

Table 5*Independent Sample t-Test for Both Populations comparing Pre-to Post Workshop**Outcomes*

GBS Question Category	Workshop Offering	<i>n</i>	Mean (SD)	Levene's Test for Equality of Variances (Significance)	T (df)	Significance (One-sided p)
Preparedness Question Mean	Pre-Workshop	52	3.43 (1.24)	1.52 (0.22)	-3.27 (86)	<0.001
	Post-Workshop	36	4.17 (0.62)			
Likelihood Question Mean	Pre-Workshop	52	3.15 (0.65)	0.96 (0.33)	-3.03 (86)	0.002
	Post-Workshop	36	3.54 (0.48)			
Self-Efficacy Question Mean	Pre-Workshop	52	2.79 (0.62)	0.093 (0.76)	-4.697 (86)	<0.001
	Post-Workshop	36	3.42 (0.61)			

Table 6*Mann-Whitney U Test for both Populations Pre- and Post-workshop*

GBS Question Category	<i>n</i>	Mann-Whitney U	Wilcoxon W	Standard Error	Asymptotic Sig. (2-sided test)
Preparedness Question Mean	88	1477	2143	117.305	<0.001
Likelihood Question Mean	88	1240.50	1906.50	111.736	0.006
Self-Efficacy Question Mean	88	1488	2154	116.283	<0.001

Figure 3*Pre- and Post-Workshop Mean Scores by Category*

Finally, a Pearson's correlation test was done to analyze the relationship between the categories on the GBS (see Table 7). This test demonstrated significant correlations, as defined by a p value of less than 0.05, between all three categories. Scores in the preparedness category were correlated with the likelihood category ($p=0.003$ pre-workshop and $p<0.001$ post-workshop) and the self-efficacy category ($p=0.020$ pre-workshop and $p=0.005$ post-workshop). Scores in the likelihood category were also correlated with self-efficacy ($p<0.0001$ pre-and post-workshop). This correlation demonstrated that participant responses in each category reflect similar outcomes pre- and post-workshops. Due to having non-paired, anonymous survey results on both the pre- and post-workshop surveys, inferential statistical analysis was limited.

Table 7*Pearson's Correlation Coefficient*

GBS Question Category		Preparedness Question Mean		Likelihood Question Mean		Self-Efficacy Question Mean	
		Pre	Post	Pre	Post	Pre	Post
Preparedness Question Mean	Pearson Correlation	1	1	0.409	0.671	0.321	0.458
	Significance (2-tailed)			0.003	<0.001	0.020	0.005
	<i>n</i>	52	36	52	36	52	36
Likelihood Question Mean	Pearson Correlation	0.409	0.671	1	1	0.526	0.552
	Significance (2-tailed)	0.003	<0.001			<0.001	<0.001
	<i>n</i>	52	36	52	36	52	36
Self-Efficacy Question Mean	Pearson Correlation	0.321	0.458	0.526	0.552	1	1
	Significance (2-tailed)	0.020	0.005	<0.001	<0.001		
	<i>n</i>	52	36	52	36	52	36

Resource Utilization

The secondary outcome, utilization of mental health resources by students, was measured by comparing the number of concerning behavior reports entered and the

number of referrals to the Student Assistance Program during the four months before and after implementation of the EBP project. As shown in Table 8, the percentage change comparing before and after the implementation was calculated for each secondary outcome measure. When comparing the pre-implementation period of April 1, 2021, to August 1, 2021, to the post-implementation period of September 1, 2021, to January 1, 2022, a 115.09% increase in the number of concerning behavior reports were entered and an 87.54% increase in the number of referrals made to the Student Assistance Program. This increase in reporting could also represent other confounding variables such as the persistent effects on mental health of the COVID-19 pandemic. While this data cannot be cited as a direct result of the project's implementation, the results show a considerable increase in reporting and referrals, which were a primary focus of the workshop.

Table 8

Utilization of Resources

	Pre-Workshop (April 1, 2021 to August 1, 2021)	Post-Workshop (September 1, 2021 to January 1, 2022)	Percent Change
Concerning Behavior Reports	53	114	115.09%
Referrals to SAP	32	60	87.54%

Economic Considerations

The implementation and sustainment of this model requires economic consideration of the associated costs. These costs include salaries of program coordinators and facilitators, printing costs for teaching materials, and marketing costs

for advertising the workshop offerings. The success of the model also relies on the availability of mental health resources, including a response team to review concerning behavior reports and make referrals. The success also relies on the resources and programs themselves to which the distressed student could be referred. The community college site has these mental health resources available; however, they will need to be sustained to respond to student needs appropriately.

Implications for DNP Role as Leader/Innovator

The implementation of this DNP evidence-based project demonstrated that the DNP prepared nurse could lead change within organizations to improve access to mental health care through educational interventions aimed toward reducing barriers. The DNP essentials applied during this project included Essential I: Scientific Underpinnings for Practice, Essential III: Clinical Scholarship and Analytical Methods for Evidence-Based Practice, and Essential VI: Interprofessional Collaboration for Improving Patient and Population Health Outcomes (AACN, 2006). American Organization of Nurse Executives (AONE) competencies used included Communication and Relationship building, Business Skills, and Leadership (AONE, 2015).

For DNP Essential I, Scientific Underpinnings for Practice, the co-investigators used the bystander effect theory as a framework to implement an evidence-based model to identify and respond to barriers impacting a bystander's decision to respond to a mental health concern. This approach led to improved mental health awareness, reduced mental health stigma, and promoted the utilization of mental health resources at the project site. Application of DNP Essential III, Clinical Scholarship and Analytical

Methods for Evidence-Based Practice, was achieved using the Iowa model for EBP to translate existing research into practice. During this process, the co-investigators critically appraised the evidence to select the intervention, used information technology to collect data, designed an evaluation plan, and disseminated findings, all while integrating feedback from key stakeholders. Using DNP Essential VI, Interprofessional Collaboration for Improving Patient and Population Health Outcomes, the co-investigators collaborated with multiple individuals to choose a topic relevant to the project site and provided clarification about the role of the DNP throughout the project implementation.

The AONE Competency, Communication and Relationship Building, was achieved through presenting to diverse audiences within the organization, collaborating with subject matter experts, and representing the organization to the community through the grant application process. Business skills were used to develop the organizational SWOT analysis, to facilitate the formal development of a partnership with the local mental health crisis center, and to develop a feasible timeline and budget for implementation. Finally, the co-investigators demonstrated the Leadership AONE competency through the use of systems thinking to consider how the organizational structure and surrounding environment would impact the delivery of mental health care in the community, and through using change theory to facilitate successful project implementation.

Process and Outcome Recommendations

Based on this implementation, several process recommendations can be made for future similar implementations. No negative effects to the participants or organization were noted throughout the implementation. Participants in the BeVocal workshops reported increased awareness of the available resources offered by the college and in the community, which demonstrated increased opportunity for students to be referred to and access mental health care. Recruitment challenges were the primary process obstacle, which could be improved with more targeted workshops in classrooms, student organizations' meetings, and faculty/staff meetings. To improve participation by adjunct faculty, incentives to attend workshops such as payment for time spent could encourage more participation.

The results of the data analysis demonstrated an improvement in participant's self-rating of preparedness, likelihood to intervene, and self-efficacy after the BeVocal workshop. Resource utilization, including reporting and referrals to campus mental health services also demonstrated an improvement after the intervention. Therefore, the co-investigators recommend the implementation of a bystander intervention model focused on mental health to enhance student utilization of mental health resources in the community college setting.

Conclusion

The implementation of the BeVocal model improved the confidence of bystanders to respond to a mental health concern of a student and refer to available resources. This confidence should increase the number of referrals and enhance the use of resources,

which contributes to sustainment and accessibility of organizational resources. While the issues contributing to mental health concerns in college students will persist, this framework that promotes action will assist the campus community's response (The Bystander Intervention Initiative at the University of Texas at Austin, n.d.).

Without sustainment of the BeVocal model, mental health resources could remain underutilized and may be discontinued. Mental health stigma would continue to be perpetuated and students may not receive adequate support when in need, leading to potential reduction in college enrollment and retention. Most importantly, rates of anxiety, depression, suicide, and substance use could remain unaffected.

Dissemination Plan

The implementation process and outcomes of this EBP project was disseminated as part of the co-investigators' Doctor of Nursing Practice culminating project to university faculty, graduate students, and administration in the School of Nursing. The EBP project findings will also be disseminated internally within the project site and externally to national and international audiences. The co-investigators will present the findings to the internal stakeholders involved in the implementation process as well as college administrators. The findings will also be presented to the BeVocal leadership at the University of Texas at Austin. The project co-investigators will submit the findings for presentation at the National Association of Student Personnel Administrators conference. Finally, the co-investigators will submit the findings for publication to the *Worldviews on Evidence Based Nursing* journal.

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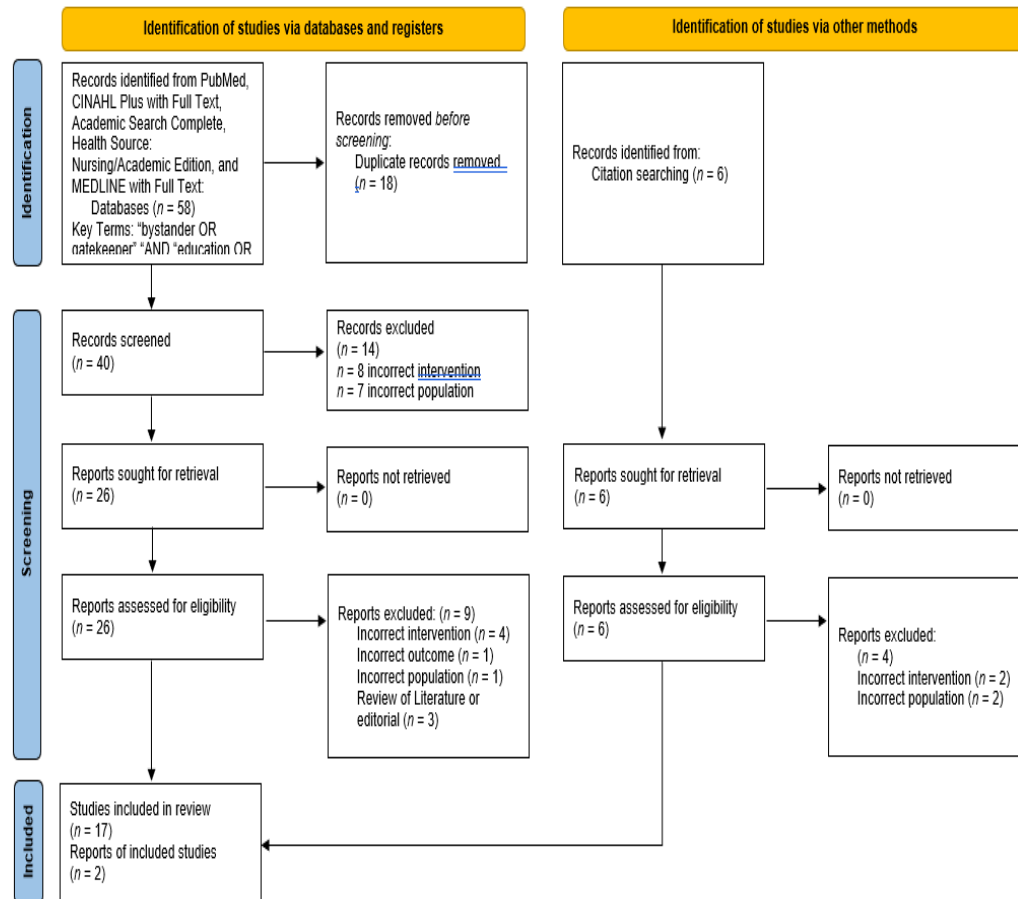
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Appendix A: PRISMA Diagram

Implementation of a Bystander Program to Enhance Utilization of Mental Resources in a Community College Setting



From: Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ* 2021;372:n71. doi: 10.1136/bmj.n71.

Appendix B

Table of Evidence

Citation	Conceptual Framework	Design/Purpose	Sample/Setting	Measurement of Major Variables	Study Findings	Appraisal of Worth to Practice	Strength & Quality of Evidence
Bridges et al. (2018). Using the PRECEDE-PROCEED model for an online peer-to-peer suicide prevention and awareness for depression (SPAD) intervention among African American college students: Experimental study.	PRECEDE - PROCEED	<p>Two designs: (1) Single group repeated measures. Measured pretest, post-test and one-month FLUP. Used for peer educators (2) One group post-test only. Used for trained students</p> <p>Aimed to strengthen health promotion interventions for depression awareness and suicide prevention</p> <p>Intervention: culturally appropriate peer-to-peer education program. Peer educators had a 4-module curriculum delivered via LMS, self-paced over 4 weeks. Peer educators</p>	<p>African American college students (18-24 years old) at one university in the U.S.</p> <p><i>n</i>=29 peer educators and 300 students</p>	<p>40-item instrument for peer educators</p> <p>33-item instrument for trained students (subset of the first)</p> <p>Validated by a panel of 6 experts in 2 rounds. Tested at another similar institution and had acceptable correlation coefficients (0.73 to 0.97)</p>	<p>Peer educators – significant improvement in attitudes about depression ($p=0.003$), managing depression ($p=0.0001$), skills for helping people with depression ($p=0.0001$), reinforcing factors ($p=0.018$), enabling factors ($p=0.00001$), and behavior ($p=0.016$). There was no significant</p>	<p>Limitations: Self-reported data Convenience sampling No monitoring of peer educators No control group Only African American participants</p> <p>Recommendations: Online SPAD modules effective at improving predisposing, reinforcing,</p>	Level 2B

		<p>given 1-2 weeks to deliver intervention to 10 peers</p> <p>DV's: Peer educator's predisposing factors, reinforcing factors, enabling factors and behavior related to suicide prevention and depression (SPAD)</p> <p>Trained students predisposing factors and behavior related to suicide prevention and depression</p>		<p>Cronbach's $\alpha > 0.80$ for 5 of the 7 subscales</p>	<p>change in knowledge about depression and attitudes about helping people with depression (both high at baseline)</p> <p>Trained students- after training, satisfactory scores were significant for attitudes about depression</p> <p>($p=0.021$) and attitudes about helping people with depression ($p=0.043$). Scores were unsatisfactory for knowledge about depression, attitudes about managing depression, skills, and</p>	<p>enabling factors and behaviors of direct participants</p> <p>Peer-to-peer programs not effective in students trained by peers</p>	
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					behavior ($p=0.0001$)		
Coleman et al. (2019). Kognito's avatar-based suicide prevention training for college students: Results of a randomized controlled trial and a naturalistic evaluation.	None identified	<p>Two designs:</p> <p>(1) RCT including pretest, posttest, and 2-month FLUP</p> <p>(2) pre and post measurement of help-seeking with administrative data</p> <p>To evaluate effectiveness of online interactive suicide prevention training</p> <p>Intervention: Kognito at Risk for College students virtual simulation program</p> <p>DV's: prevention preparation and efficacy, ability to identify and refer youth at risk, ask those of concern about suicide, and help seeking of trainees</p>	<p>(1) $n=51$ randomized participants (undergraduate) in final analysis</p> <p>$n=24$ in intervention group $n=27$ in control group</p> <p>(2)$n=19897$ students</p>	Combination of tools from previous studies ($\alpha >0.70$)	<p>(1) Large effect size on gatekeeper efficacy and gatekeeper preparation ($p<0.01$) in the post period, falling to medium-large in the 2-month FLUP</p> <p>Medium increase in referring peers to mental health services ($p<0.05$)</p> <p>Medium-large increase in likelihood to seek help themselves ($p<0.05$)</p> <p>Asking peers about distress</p>	<p>Limitations:</p> <p>78% of participants were female</p> <p>Completed independently of Kognito</p> <p>Small sample in study 1</p> <p>Recommendations:</p> <p>Virtual simulation gatekeeper training (Kognito) increases gatekeeper efficacy and preparation, likelihood to refer or seek help themselves. It does not improve asking peers about suicide.</p>	Level 1B

					<p>or suicidal thoughts showed no difference at FLUP</p> <p>(2) Help seeking rate of trainees was over two times the rate of the remaining student body ($p<0.001$)</p>		
<p>Hashimoto et al. (2016). Effectiveness of suicide prevention gatekeeper-training for university administrative staff in Japan.</p>	<p>None identified</p>	<p>Single group with observations pre, post, and 1-month FLUP.</p> <p>To examine effectiveness of gatekeeper training for administrative staff</p> <p>Intervention: 2.5-hour gatekeeper-training based on MHFA with small group role play</p> <p>DV's: competence, confidence, behavior intention, attitude</p>	<p>$n=76$ administrative staff at one University in Japan.</p> <p>$n=55$ completed FLUP</p>	<p>Suicide Intervention Response Inventory (SIRI-2) to measure competence</p> <p>Confidence and attitudes measured on Likert scale</p> <p>Behavior measured with questionnaire adapted from first aid guidelines for suicide in Japan.</p>	<p>Significant improvement in confidence, competency, and behavior intention after training and into the FLUP period ($p<0.003$).</p> <p>No significant findings related to attitudes</p>	<p>Limitations: Tools to measure confidence, attitudes, and behavioral intentions not validated</p> <p>No control group</p> <p>Risk of selection bias</p> <p>Recommendations: Gatekeeper training improved competency of staff to manage suicidal students</p>	<p>Level 2C</p>

Hill et al. (2020). Promoting the community's ability to detect and respond to suicide risk through an online bystander intervention model-informed tool: A randomized controlled trial.	BIM	<p>RCT with measured pre, post, and 6-month FLUP.</p> <p>To assess the effect of BIM tools on the community's ability to detect and respond to suicide risk</p> <p>Intervention group provided online DARTS fact sheet addressing parts of BIM.</p> <p>Control group received publicly available information from websites.</p> <p>DV's: self-reported readiness, confidence, and intent to intervene.</p>	<p>$n=281$ participants (mean age 35.67, majority female Caucasian)</p> <p>$n=68$ completed FLUP</p>	<p>DARTS-RS: 16-item adapted Bystander Intervention in Bullying and Sexual Harassment questionnaire (internal consistency $\alpha >0.85$)</p> <p>CITIS: 11-item adapted Bystander Readiness to Help Questionnaire (internal consistency $\alpha >0.87$)</p> <p>MCS: 10-item manipulation check. (internal consistency $\alpha =0.96$)</p>	Significantly higher DARTS-RS and CITIS scores in the experimental group after training	<p>Limitations: Community study in Australia</p> <p>Homogenous sample</p> <p>Unable to assess 6-month FLUP (attrition rate)</p> <p>Self-reported data on adapted tools</p> <p>Recommendations: BIM training increases ability to identify suicide risk, interpret importance, assume responsibility, know how to help, feel confident to do so, decide to help.</p>	Level 1B
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Kuhlman et al. (2017). Intention to enact and enactment of gatekeeper behaviors for suicide prevention: An application of the theory of planned behavior.	Theory of Planned Behavior	<p>Quasi-experimental with control group</p> <p>To examine effects of training on intent to question others and on actual referring</p> <p>Intervention: 1–2-hour didactic QPR training</p> <p>DV's: intent to question about suicidal thoughts and self-reported actual questioning and referring behaviors.</p>	<p>$n=169$ in control group</p> <p>$n=366$ undergraduate students, 179 faculty/staff and 37 community members in intervention group</p> <p>$n=216$ participated in FLUP</p>	<p>Evaluative/affective attitudes, subjective norms, gatekeeper behaviors, and situational behaviors were measured by scales created by researchers based on literature ($\alpha > 0.71$)</p> <p>Behavioral control measures derived from previous study ($\alpha > 0.81$)</p>	<p>Those trained were significantly more likely to report inquiring about suicidal ideation ($p=0.015$) and referring to mental health treatment ($p=0.038$).</p> <p>Trained gatekeepers significantly higher self-efficacy, evaluative attitudes, affective attitudes, and perceived knowledge. No significance found for subjective norms.</p>	<p>Limitations: Funded by SAMSHA grant</p> <p>No randomization</p> <p>Self-reporting</p> <p>Recommendations: QPR training is effective for questioning and referring</p> <p>Self-efficacy is an important predictor of intentions to intervene</p> <p>Situational barriers impede gatekeeper behavior</p>	Level 2B
McLean, K., & Swanbrow Becker, M. A. (2018).	None identified	<p>RCT with a post-test between groups design</p> <p>To examine effectiveness of suicide prevention</p>	<p>One large University</p> <p>$n=162$ RA's (aged 18-122)</p>	<p>39-item pre and post training survey, and 67-item FLUP survey</p>	<p>RA's reported increased knowledge ($p<0.001$) after training.</p>	<p>Limitations: Self-reporting with unvalidated measurement tool</p>	Level 1B

Bridging the gap: Connecting resident assistants and suicidal residents through gatekeeper training.		<p>training in preparing RA's to be gatekeeper</p> <p>Intervention: 1-hour interactive training program led by two professionals, including discussion of suicide prevalence, barriers to intervene and how to intervene.</p> <p>Control: stress and time management program</p> <p>DV's: intervention behaviors, help-seeking behaviors, perception of resident distress and suicidality</p>	were randomly assigned to the intervention or control group (81 in each), matched pairs		There was no significant effect on intervening behaviors, ability to identify a suicidal resident, and help-seeking of residents.	<p>Variability in training by different facilitators</p> <p>Recommendations: This 1-hour gatekeeper training for RA's did not effectively increase intervention behaviors or awareness</p>	
Muehlenkamp, J. J., & Hagan, C. R. (2020). Factors predicting intent to intervene with a potentially suicidal peer.	Theory of Planned Behavior	<p>2x2 Experimental design: random assignment to 1 of 4 groups (low and high suicide risk; internal and external cause of distress)</p> <p>To determine how theory of planned behavior relates to students' intent to intervene with a suicidal peer</p> <p>IV: perceived severity and locus of responsibility</p>	n=420 undergraduate students at 1 University, randomly selected	Likert scale rating on questions created by authors modeled off existing tools	Prior training in suicide prevention and social desirability significantly correlated with attitudes and perceived behavioral control ($p < 0.01$).	<p>Limitations: Measured self-reported intent to act, unvalidated tools</p> <p>Recommendations: Peers who perceive risk to be high more likely to refer peers for help. As behavioral</p>	Level 1B

		DV's: behavioral intention, attitudes, perceived behavioral control, subjective norms, and social desirability			Risk severity and perceived behavior control was significantly associated with intent to refer ($p<0.01$).	control increased, likelihood to refer increased.	
Pullen et al. (2016). A descriptive study of baccalaureate nursing students' responses to suicide prevention education.	None identified	<p>Multi-method descriptive study</p> <p>To describe senior baccalaureate students' responses to an EBP suicide prevention gatekeeper training program</p> <p>Intervention: QPR, 90-minute training, administered during class times by a QPR certified instructor</p> <p>DV's: Student's self-appraisal of knowledge, skills, and abilities and comfort regarding suicide prevention</p>	<p>Conducted on 1 of 5 campuses of a research-intensive university in a rural state in the U.S.</p> <p>$n=150$ first-semester senior nursing students enrolled in psychiatric nursing over period of 2 years comprised of a convenience sample</p>	QPR Pre-Survey and Post-Survey (assessment of level of comfort and knowledge regarding suicide)	<p>Statistically significant increase between post and pre-course scores (all $p<0.0005$)</p> <p>Thematic analysis revealed "Becoming capable of intervening with persons at risk for suicide"</p>	<p>Limitations: Homogenous sample population</p> <p>Cost for training: facilitator training, material-cost, and funding</p> <p>Recommendations: Use of QPR model feasible with college student population</p> <p>Use of QPR model for college students</p>	Level 3B

						leads to increase in understanding and comfort level surrounding suicide prevention	
Rallis et al. (2018). A brief peer gatekeeper suicide prevention training: Results of an open pilot trial.	None identified	<p>Pilot study with quantitative analysis</p> <p>To pilot an EBP suicide gatekeeper training program with a general college student population</p> <p>Intervention: EBP gatekeeper training (1-hour) modeled after Campus Connect training, facilitated by psychology doctoral students on campus</p> <p>DV's: Declarative knowledge, perceived knowledge, identification, and referral of students</p>	<p>$n=231$ students (mean age 21.1) from a diverse university campus on the Mid-Atlantic coast of the U.S.</p> <p>$n=178$ students retained at 3-month FLUP assessment (53 students not retained due to failed response attempts by investigator)</p>	<p>Declarative knowledge scale (KR-20 coefficients: pre-training = 0.21, post-training = 0.42, and FLUP = 0.52)</p> <p>Perceived knowledge Questionnaire (acceptable reliability: pre-training = 0.94, post-training = 0.93, and FLUP = 0.96)</p> <p>Number of suicidal students identified</p>	<p>Declarative knowledge increased by 40.4% and perceived knowledge increased by 43.4%</p> <p>Decay of declarative and perceived knowledge between post-training and FLUP $t=-7.90$, $p<0.001$ and $t=-3.99$, $p<0.001$</p> <p>Total number of referrals increased from 25 to 55</p> <p>Significant increase in number of</p>	<p>Limitations: Lack of control group</p> <p>Pilot study design</p> <p>Identifications and referrals measured only by self-report</p> <p>Short assessment time period with 3-month FLUP</p> <p>Limited generalizability of sample population</p> <p>Recommendations: Use of EBP gatekeeper training increases college student knowledge about</p>	Level 5B

				Number of suicidal students referred	participants who identified any suicidal students and reported making at least one referral ($\chi^2=5.02$, $p=0.014$) and ($\chi^2=9.59$, $p=0.001$), respectively	suicide prevention Use of EBP gatekeeper training increases referral count of college students to resources	
Reiff et al. (2018). I CARE: Development and evaluation of a campus gatekeeper training program for mental health promotion and suicide prevention.	Social Ecological Model	<p>Mixed methods study</p> <p>Assess the impact of I CARE training in providing support to students experiencing distress or mental health problems</p> <p>Intervention: I CARE offered in two formats: Full-day (7-hour in person) and Hybrid (30-minute online module and 3-hour in person) facilitated by CAPS clinicians</p> <p>DV's: Knowledge, readiness to intervene, satisfaction with</p>	<p>University of Pennsylvania between July 2014 and December 2016</p> <p>$n=1,054$ participants in I CARE workshop; 595 students and 459 staff/faculty; 345 participants in full-day format and 709 in the hybrid (online plus 3-hr. in-person) format</p>	<p>Knowledge of support and crisis intervention skills (3 dichotomous true/false questions) – reliability not calculated</p> <p>Readiness to Intervene (rate agreement with six statements). Good internal reliability ($0.72 \leq \alpha \leq 0.76$)</p> <p>Satisfaction with workshop</p>	<p>Knowledge scores and readiness to intervene ratings increased significantly ($t(996)=25.30$, $p<0.001$) and ($t(987)=37.31$, $p<0.001$), respectively</p> <p>Main effect of time for knowledge and readiness were significant ($F(986)=1275.96$, $p<0.001$)</p>	<p>Limitations: Data collection at one site</p> <p>Lack of control group and random assignment</p> <p>Facilitator variation</p> <p>Self-report measures used</p> <p>Recommendations: Use of either hybrid of full-day training in college students and faculty/staff</p>	Level 3B

		workshop, implementation of skills, qualitative discussion regarding workshops	<i>n</i> =452 participants in FLUP sample due to lack of survey response	<p>(yes/no response)</p> <p>Implementation of Skills (interaction assessment since workshop attendance)</p> <p>Qualitative information gathering based on open-ended questions and discussion groups</p>	<p>Effect of training format for knowledge and readiness were significant ($F(986)=4.66$, $p=0.03$)</p> <p>64.4%, $n=291$ reported interacting with student in distress since training. 92%, $N=271$ reported using I CARE skills during interaction</p> <p>2016: 39% reported referring at least one student.</p> <p>2017: 64% reported referring at least one student</p>	<p>leads to an increase in knowledge/readiness to intervene in suicide prevention</p> <p>Use of role play and experiential learning is essential in the training program</p> <p>Longitudinal FLUP assessment completed with retention of skills</p>	
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					Effect of time since training was marginally statistically significant and negative, with each day associated with decline in knowledge of 0.0003 points of readiness, $Z=-1.73$, $p=0.08$		
Rein et al. (2018). Evaluation of an avatar-based training program to promote suicide prevention awareness in a college setting.	None identified	<p>Quasi-experimental</p> <p>Evaluation of an online EBP gatekeeper training program to prepare users to intervene with at-risk college students with a campus-wide initiative</p> <p>Intervention: Kognito training modules made available online between April 2014 to September 2015</p> <p>DV's:</p> <p>likelihood, self-efficacy, preparedness scores</p>	<p>$n=2,727$ participants across all six modules at West Virginia University</p> <p>$n=1,187$ separated due to only completing pre-training survey</p> <p>Made available to any WVU faculty, staff, or under-graduate, or professional student</p>	GBS created by Kognito's assessments	<p>Preparedness and self-efficacy scores improved from pre- to post-testing across all modules and participant types</p> <p>Likelihood scores increased significantly from pre- to post-testing across all modules and</p>	<p>Limitations:</p> <p>Self-reported assessments</p> <p>User assessments completed online and unsupervised</p> <p>61.6% of participants completed surveys</p> <p>Data collected from one site (WVU)</p> <p>Lack of FLUP data measured</p>	Level 2B

						Recommendations: Effective online EBP Gatekeeper module training to increase preparedness, likelihood, and self-efficacy in working with students at risk for suicide	
Ross et al. (2021). The suicide prevention for college student gatekeepers' program: A pilot study.	None identified	<p>Pilot study</p> <p>To pilot a peer-led training program for college students to enhance engagement and dissemination of content</p> <p>Intervention: Suicide Prevention for College Student Gatekeepers Training Program with pre- and post-assessment (90-minute, co-led, live program format)</p> <p>DV's: Suicide prevention self-efficacy, stigmatizing beliefs about suicide, information about suicide, gatekeeper skills, suicide</p>	<p>Undergraduate students at a small, private university in the Southeastern U.S.</p> <p>Students enrolled in one of nine sections of Introduction to Psychology were recruited throughout Fall 2017</p> <p>$n=65$ students participating in the Suicide Prevention for</p>	<p>Suicide Prevention Self-Efficacy (researcher developed items)</p> <p>Stigmatizing beliefs about suicide (researcher developed items)</p> <p>Information about suicide (researcher developed items)</p> <p>Gatekeeper Skills (GBS by</p>	<p>Participants reported significantly increased suicide prevention self-efficacy and had a significant increase in percentage of correctly answered items regarding suicide prevention information at post-training and FLUP</p> <p>Stigmatizing belief scores</p>	<p>Limitations: Need to use reliable scales (i.e., Stigmatizing measures)</p> <p>Use of homogenous sample population</p> <p>Assess the benefit of using a peer-led model</p> <p>Pilot study design</p> <p>Recommendations: Use of EBP model using teaching as well</p>	Level 5B

		prevention decision-making, program acceptability, and use of prevention skills at FLUP	College Student Gatekeepers Training Program	Albright et al., 2016) Suicide Prevention Decision-Making Use of suicide prevention skills	increased at post-training and FLUP Increased self-efficacy on GBS scale 14% of participants indicated they had used skills over past 12 weeks	as role-play is feasible for assisting college students with suicide prevention awareness	
Samuolis et al. (2020). Evaluation of a peer-led implementation of a suicide prevention gatekeeper training program for college students.	None identified	Quasi-experimental Is QPR effective among college students when college students (peers) are implementing the training? Intervention: QPR training implemented by certified facilitators (1-hour program) DV's: Knowledge of suicide, likelihood of intervening, and self-efficacy to intervene	$n=182$ students from a mid-sized Catholic liberal arts university in the northeast region of the U.S.; 21 student data excluded due to missing data or prior exposure to QPR training	Scales utilized on questionnaires from QPR Institute	Average summary score increases for knowledge ($t(161) = -24.742$, $p < 0.01$), self-efficacy to intervene ($t(161) = -10.371$, $p < 0.01$), and likelihood of intervening ($t(161) = -15.255$, $p < 0.01$)	Limitations: Small, homogenous sample Lack of control/comparison group Measured during short-time frame Did not include an assessment of gatekeeper behaviors Recommendations:	Level 2B

						QPR training using peer-to-peer approach is feasible and effective for college students	
Santacrose et al. (2020). Intervene: Modeling pro-social bystander behavior in college students through online video.	Pro-Social Bystander Intervention Theory Bandura's Social Cognitive Theory	RCT Evaluate if the Intervene video as a stand-alone intervention is effective at increasing students' self-reported likelihood to intervene, immediately post-viewing and at a 4-week FLUP Intervention: Intervene video (20-minute film) covering brief scenarios of different problematic situations DV's: Extent to which participants would consider: particular situation to be a problem, feel responsible to do something in a particular situation, and how likely they would be to intervene in a situation; social norms	Two random stratified samples from the Cornell University Registrar Database Control sample baseline survey online ($n=799$), and 4-week FLUP survey online ($n=509$) The video sample ($n=444$), 4-week FLUP survey online ($n=344$) $n=511$ participants submitted both pre- and post-	Survey measuring a condensed version of five-step bystander model and assessment of social stigma related to intervening	Video condition participants reported being more likely to intervene immediately post-intervention and at 4-week FLUP	Limitations: Lack of sustained effect for emotional distress scenario Bystander intervention behavior not measured, only self-reported likelihood Repeated testing of treatment condition serves as threat to internal validity Homogenous sample population of Cornell students Recommendations: Online video alone can be useful to educate	Level 1B

		for intervening in a particular situation	video survey, 67 participants excluded due to completing survey in less than 20 minutes (did not complete entire training)			college students on different problematic situations	
Shannonhouse et al. (2017). Suicide intervention training for college staff: Program evaluation and intervention skill measurement.	Interpersonal-Psychological Theory of Suicide	<p>postQuasi-experimental</p> <p>Assess the effect of ASIST on college personnel's suicide intervention skills (SI-skills), attitudes towards suicide, knowledge about suicide, and comfort/competence/confidence in responding</p> <p>Intervention: ASIST training teaches Pathway for Assisting Life (PAL) model for suicide first aid</p> <p>DV's: knowledge about suicide, levels of comfort, competence, and confidence in working with a person at-risk for suicide, attitudes about suicide and SI skills</p>	<p>Experimental group (n=50)</p> <p>Control group (n=31)</p>	<p>Pre-Post Training Surveys (15 and 18-item self-report scales adapted from Washington's Youth Suicide Prevention Program) – internal consistencies somewhat low (pre-test =0.51, post-test=0.84, and test-retest reliability=0.50)</p> <p>Suicide Intervention Response Inventory 2nd edition (SIRI-2)</p>	<p>SI- no statistically significant interaction effect between treatment conditions across time (F [1, 75]=0.576; p=0.450)</p> <p>Experimental participants decreased underestimation scores across time (F [1, 75]= 8.65; p=0.004) and increased overestimation scores over time (F[1,</p>	<p>Limitations: Sample purposively selected and not randomized</p> <p>Differences in both pre-test scores and group size between treatment groups</p> <p>Self-selection bias for training</p> <p>ASIST standardized training</p> <p>Facilitator effects between training sessions</p>	Level 2B

				– adequate internal consistency (pre-test =0.87, post-test=0.90 and test-retest reliability =0.84).	75]=20.002; p<0.001) Statistically significant result related to attitudes about suicide between treatment conditions across time (F [1, 70]=33.336, p<0.001) and knowledge about suicide across time (F[1, 70]=26.677; p<0.001) Statistically significant differences found on all three between-treatment conditions across time	Accuracy of self-reported data Recommendations: Use of ASIST EBP model training leads to an increase in participants confidence, competence, and likelihood to intervene	
Smith-Millman et al. (2020). Effectiveness of an	None identified	Quasi-Experimental Extend findings on the use of Kognito online gatekeeper training by	Thirty-five campuses implemented the	GBS from Albright et al. (2006) (α =0.75-0.81)	Student and faculty demonstrated increases in preparedness	Limitations: No control or comparison group	Level 2B

online suicide prevention program for college faculty and students.		<p>assessing behavioral change over a 3-month period</p> <p>Intervention: Kognito online gatekeeper training (45–60-minute modules)</p> <p>DV's: perceived preparedness, likelihood of intervening, self-efficacy</p>	<p>Kognito trainings</p> <p><i>n</i>=170 students from 24 colleges/universities</p> <p><i>n</i>=140 faculty members from 23 colleges/universities</p> <p>Participants were only included if they completed all aspects of the study (pretest survey, post-test, FLUP surveys)</p>	Gatekeeper Behaviors	<p>from pre- to post-intervention (M[student]=12.31 to 16.60) and (M[faculty]=10.09 to 16.03)</p> <p>Faculty reported significant gains related to likelihood from pre- to post-intervention (M=4.66 to M=5.37)</p> <p>Students reported decrease in likelihood from pre-test to post-test (M=5.76 to M=4.99) to 0.62)</p> <p>Faculty and students reported gains of self-efficacy from pre-test to post-test</p>	<p>Selection bias in sample population</p> <p>Homogenous sample population</p> <p>Recruitment differences depending on school</p> <p>Longitudinal FLUP of >3 months should be assessed</p> <p>Recommendations: Use of Kognito online training modules is flexible and effective for college students and faculty Increase scores on GBS scale for all populations</p>	
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					<p>(M[student]=7.98 to 9.43) and (M[faculty]=8.03 to 9.65)</p> <p>Students reported increase in number of students they asked about suicide from pre-test to FLUP (M=0.20 to 0.37); whereas faculty reported decreases (M=0.61 to 0.53)</p> <p>Students reported increase in the number of suicidal students they referred to counseling services from pre-test to FLUP (M=0.19 to 1.52); whereas faculty</p>		
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					reported no change (M=0.59)		
Tsong et al. (2019). Suicide prevention program on a diverse college campus: Examining the effectiveness of a peer-to-peer model.	None identified	<p>Non-randomized pretest-posttest design</p> <p>To explore the effectiveness of a peer-to-peer model of QPR suicide prevention workshops to examine if there were significant changes in workshop attendees' knowledge of and attitudes toward suicide</p> <p>Intervention: QPR workshop (90-minute)</p> <p>DV's: knowledge of and attitudes towards suicide prevention</p>	<p>Large public university campus on the West Coast</p> <p>Conducted over period of four academic semesters</p> <p>25 (90-minute) peer-to-peer QPR suicide prevention workshops</p> <p>n=479 student attendees, 477 participants completed questionnaire</p>	<p>QPR survey developed by the QPR institute</p> <p>KAS by Shaffer et al. (1991)</p>	<p>Significant increases in all nine areas of the QPR survey (p<0.001 in all areas)</p> <p>Significant changes in participants' KAS scores, immediately after the workshop in: normality of people who kill themselves (p<0.001), suicide and risky behaviors (p<0.001), and people who talk about suicide do not complete suicide (p=0.033)</p>	<p>Limitations: Selection bias in order to have diverse sample representation</p> <p>No FLUP data measured</p> <p>Participants' self-report and self-rating</p> <p>Mental illnesses not addressed in the workshop</p> <p>Recommendations: QPR workshops leads to an increase in knowledge regarding suicide prevention in college students</p>	Level 2B

Wolitzky-Taylor et al. (2020). Suicide prevention on college campuses: What works and what are the existing gaps? A systematic review and meta-analysis.	Clinical Intervention Paradigm Problem-Solving Paradigm	Systematic Review and Meta-analysis To examine the effects of universal and targeted suicide prevention programs on relevant outcomes in college campuses Meta-analytic process included empirical studies that investigated effects of suicide prevention programs on college students and/or staff DV's: knowledge, skills, and self-efficacy related to suicide prevention	College suicide prevention programs published from 2009 to 2018 assessed on outcomes including knowledge, skills, self-efficacy, suicidal ideation, and suicidal behaviors n=11 articles included in quantitative analysis and 4 articles included in the qualitative synthesis	N/A	Improvement in knowledge scores ($z=4.89$, $p<0.001$) Improvement in skill scores ($z=4.60$, $p<0.001$) Improvement in self-efficacy scores ($z=6.35$, $p<0.001$)	Limitations: Only includes college student population Focused on broad efforts to address suicidality Focused on U.S. college campuses only Meta-analysis limited by the state of current research Recommendations: Gatekeeper training programs are beneficial for college students in increasing KSA's	Level 3B
Zinzow et al. (2020). Evaluation of a brief suicide prevention	Theory of Planned Behavior	Longitudinal quantitative pre/post-test design To evaluate the effects of a brief suicide prevention training for college	$n= 555$ students, faculty, and staff at a large southeastern university; 542	Suicide Knowledge and Self-Efficacy – modified version of the Suicide	Significant changes on all five knowledge and self-efficacy factors, as well	Limitations: Lack of comparison group	Level 2B

training program for college campuses.		<p>campuses on knowledge, self-efficacy to intervene, and gatekeeper behaviors</p> <p>Intervention: Gatekeeper training adopted from Campus Connect and other gatekeeper programs (90-minute program)</p> <p>DV's: Knowledge, self-efficacy to discuss suicide and refer to resources, and gatekeeper behaviors</p>	<p>participants completed both pre- and post-test surveys; 155 completed FLUP surveys</p>	<p>Intervention Training Assessment by Pasco et al. (2012) – Internal consistency is high ($\alpha=0.86-0.94$)</p> <p>Suicide Prevention Behaviors adapted from the Training Utilization and Preservation Survey-Campus Version (2017)</p>	<p>as full scale score</p> <p>FLUP scores on Suicide Knowledge and Self-Efficacy remained higher than pre-test scores, but a significant decline noticed from post-test to FLUP among most variables</p> <p>Significant change on mean number of suicide prevention gatekeeper behaviors from pre-test to FLUP ($F(1,129)=36.57, p<0.001$)</p>	<p>Facilitator discrepancy in running session</p> <p>Each session's group composition differed</p> <p>Small sample size of faculty/staff compared to student population</p> <p>Most of student participants were RA's</p> <p>Knowledge and self-efficacy measurement assessed a large number of factors with a small number of items</p> <p>Scale reliability was lower for the two-item factors used in this study</p>	
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						<p>Need longer longitudinal data collection</p> <p>Noticed that should have booster sessions to retain data</p> <p>Recommendations: The use of brief gatekeeper programs impact KSA's for college students, but need to have a booster session/refreshers</p>	
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Note. IV=Independent Variable, DV=Dependent Variable, BIM=Bystander Intervention Model, MHFA=Mental Health First Aid, EBP=Evidence-Based Practice, QPR=Question, Persuade, Refer, FLUP=Follow-up, GBS=Gatekeeper Behavior Scale, RCT=Randomized Controlled Trial, KSA=Knowledge, Skills and Attitudes, RA=Resident Assist, LMS= Learning Management System, ASIST= Applied Suicide Intervention Skills Training.

Appendix C: Participant Informed Consent (4 pages)**Informed Consent for Participation (Faculty and Staff)****“Implementation of a Bystander Program to Enhance Utilization of Mental Health****Resources for Students in a Community College Setting”**

Thank you for registering for the “bystander intervention” training workshop! Registration shows initial consent to participate in the doctoral project conducted by graduate nursing students, Jessica Powers and Lindsey Leeds, from Salisbury University’s School of Nursing and Harford Community College. Below is more information for your review and signed consent:

PURPOSE: The purpose of this doctoral project is to provide “bystander intervention” training for students, faculty, and staff of the college. The goal of the training is to increase your confidence and willingness to intervene when a student has a mental health concern as well as use of available on-campus and community resources.

PARTICIPATION: You will be asked to complete some questions before and after the one-hour training workshop. The fifteen-question survey will be anonymous and include your gender, ethnicity/race, role at the college, academic division, and your self-rating of preparedness, confidence, and likelihood to intervene for a student with a mental health concern. The training will include information about bystander theory, how to recognize a concern, and steps to intervene. During the workshop, mental health scenarios are shared; and you will be asked to participate, but participation is not required. We expect the workshop to last 90 minutes including completion of the surveys.

RISKS & BENEFITS: The potential risks of this project include exposure to mental health scenarios about depression, anxiety, and suicidality. Discussion and role play may be uncomfortable and trigger emotions; therefore, you will be able to take a break or leave the workshop if needed. You will not be asked to share any of your own mental health concerns; but if you do so, the workshop trainer may need to refer you for assistance or report the concern using the appropriate channels within the college. Resources will be provided also.

We expect the project to benefit you by providing knowledge, tools, and resources to help students who need support for mental health. In addition, we expect this project to benefit the college community by improving mental health and wellness on campus.

COMPENSATION: There is no pay or compensation involved with this project.

VOLUNTARY PARTICIPATION: Your participation is completely voluntary, and the decision to participate or decline will in no way affect your grade or current/future relationship with Salisbury University, Harford Community College or its students, faculty, or staff. You have the right to withdraw from the project at any time. You also have the right to refuse to answer any question(s) for any reason.

CONFIDENTIALITY: Virtual training workshops will not be recorded. Names of participants registered for training sessions will not be shared outside of the training

session. To preserve the confidentiality of your survey responses, all results will be anonymous as we will not collect participant names.

Your individual privacy will be maintained in all publications or presentations resulting from this project. The graduate nursing students will present findings for their final doctoral project with no personal identifying information.

If you have any questions or would like additional information about this research (doctoral) project, please contact us at jpowers4@gulls.salisbury.edu and lwright8@gulls.salisbury.edu. The Salisbury University Institutional Review Board has approved this project. You may also contact the Chair of the IRB at _____ with any questions.

A signed copy of this consent form will be given to you.

I understand the above information and have had all of my questions about participation on this research (doctoral) project answered. I voluntarily consent to participate.

Signature of Participant: _____ Date _____

Printed Name of Participant: _____

Signature of Researcher: _____ Date _____

Flesch-Kincaid Grade Level: 11.8

Grade level: Twelfth Grade

Informed Consent for Participation (Students)

“Implementation of a Bystander Program to Enhance Utilization of Mental Health

Resources for Students in a Community College Setting”

Thank you for registering for the “bystander intervention” training workshop! Registration shows initial consent to participate in the doctoral project conducted by graduate nursing students, Jessica Powers and Lindsey Leeds, from Salisbury University’s School of Nursing and Harford Community College. Below is more information for your review and signed consent:

PURPOSE: The purpose of this doctoral project is to provide “bystander intervention” training for students, faculty, and staff of the college. The goal of the training is to increase your confidence and willingness to intervene when a student has a mental health concern as well as use of available on-campus and community resources.

PARTICIPATION: You will be asked to complete some questions before and after the one-hour training workshop. The fifteen-question survey will be anonymous and include your age, gender, ethnicity/race, program of study, and your self-rating of preparedness, confidence, and likelihood to intervene for a student with a mental health concern. The training will include information about bystander theory, how to recognize a concern, and steps to intervene. During the workshop, mental health scenarios are shared; and you will be asked to participate, but participation is not required. We expect the workshop to last 90 minutes including completion of the surveys.

RISKS & BENEFITS: The potential risks of this project include exposure to mental health scenarios about depression, anxiety, and suicidality. Discussion and role play may be uncomfortable and trigger emotions; therefore, you will be able to take a break or leave the workshop if needed. You will not be asked to share any of your own mental health concerns; but if you do so, the workshop trainer may need to refer you for assistance or report the concern using the appropriate channels within the college. Resources will be provided also.

We expect the project to benefit you by providing knowledge, tools, and resources to help students who need support for mental health. In addition, we expect this project to benefit the college community by improving mental health and wellness on campus.

COMPENSATION: There is no pay or compensation involved with this project.

VOLUNTARY PARTICIPATION: Your participation is completely voluntary, and the decision to participate or decline will in no way affect your grade or current/future relationship with Salisbury University, Harford Community College or its students, faculty, or staff. You have the right to withdraw from the project at any time. You also have the right to refuse to answer any question(s) for any reason.

CONFIDENTIALITY: Virtual training workshops will not be recorded. Names of participants registered for training sessions will not be shared outside of the training session. To preserve the confidentiality of your survey responses, all results will be anonymous as we will not collect participant names.

Your individual privacy will be maintained in all publications or presentations resulting from this project. The graduate nursing students will present findings for their final doctoral project with no personal identifying information.

If you have any questions or would like additional information about this research (doctoral) project, please contact us at jpowers4@gulls.salisbury.edu and lwright8@gulls.salisbury.edu. The Salisbury University Institutional Review Board has approved this project. You may also contact the Chair of the IRB at _____ with any questions.

A signed copy of this consent form will be given to you.

I understand the above information and have had all of my questions about participation on this research (doctoral) project answered. I voluntarily consent to participate.

Signature of Participant: _____ Date _____

Printed Name of Participant: _____

Signature of Researcher: _____ Date _____

Flesch-Kincaid Grade Level: 11.8

Grade level: Twelfth Grade

Appendix D: Gatekeeper Behavior Scale

Gatekeeper Behavior Scale <i>This tool is freely available for noncommercial use and dissemination. See current citation at bottom of page.</i> Please select the number that corresponds to the label that most represents you.			
Subscale	Number	Item	Response Scale
Preparedness	How would you rate your preparedness to:		
	1	Recognize when a student's behavior is a sign of psychological distress	
	2	Recognize when a student's physical appearance is a sign of psychological distress	1- Very Low
	3	Discuss with a student your concern about the signs of psychological distress they are exhibiting	2- Low
	4	Motivate students exhibiting signs of psychological stress to seek help	3- Medium
Likelihood	5	Recommend mental health support services (such as the counseling center) to a student exhibiting signs of psychological distress	4- High
	6	How likely are you to discuss your concerns with a student exhibiting signs of psychological distress?	5- Very High
	7	How likely are you to recommend mental health/ support services (such as the counseling center) to a student exhibiting signs of psychological distress?	1-Very Unlikely
			2-Unlikely
			3- Likely
Self-Efficacy	Please rate how much you agree/disagree with the following statements:		
	8	I feel confident in my ability to discuss my concern with a student exhibiting signs of psychological distress	4-Very Likely
	9	I feel confident in my ability to recommend mental health support services to a student exhibiting signs of psychological distress	1- Strongly Disagree
	10	I feel confident that I know where to refer a student for mental health support	2- Disagree
	11	I feel confident in my ability to help a suicidal student seek help	3-Agree
			4-Strongly Agree

Albright, G., Davidson, J., Goldman, R., Shockley, K. & Mitchell-Timmons, J. 2014. Development and Validation of the Gatekeeper Behavior Scale: A Tool to Assess Suicide Prevention Gatekeeper Trainings. Manuscript submitted for publication.

Appendix E: Informational Postcard

"I can't do this anymore."

"Just get over it. Everyone has issues."

Someone just had a meltdown...

Now What?

BeVOCAL
THE BYSTANDER INTERVENTION INITIATIVE OF THE UNIVERSITY OF TEXAS AT AUSTIN

Recognize. Choose. Act.

Bystander intervention is recognizing a potentially harmful situation or interaction and choosing to respond in a way that could positively influence the outcome.

HARFORD
COMMUNITY COLLEGE

1. Recognize Harm

- Recognizing concerning behavior is an important first step in being able to help. The more behaviors you notice, the more likely it is someone may be experiencing a mental health crisis.
- Concerning behaviors include, but are not limited to:
 - deterioration in quality or quantity of work
 - storming out of the classroom when upset
 - frequent crying/tearfulness
 - suddenly shutting down social media accounts
 - angry or hostile outburst, yelling, or aggressive comments
 - restlessness or fear
 - disheveled appearance
 - noticeable and unusual cuts, bruises, or burns
 - excessive fatigue, falling asleep in class repeatedly
 - statements to the effect of going away for a long time

A survey of first-year college students in the U.S. revealed that only 24.6% of students would seek help if they had a problem, citing stigma and preference to handle problems by themselves as a reason for not seeking help (Ebert et al., 2019).

2. Choose to Respond

We all can take care of each other, and you can encourage others to do their part by intervening. Ask yourself:

- How can I be helpful in this situation?
 - Make the decision to say or do something to assist a student based on your observations.
- Am I the right person to intervene?
 - Sometimes you may feel too vulnerable or upset in the moment to deescalate the situation.

Indirect Action

- Get other people involved, such as campus faculty/staff.
- Call 911 or Public Safety (x2272) if the person poses an immediate threat to themselves or others.
- Contact Student Intervention and Prevention (SIP) Team by submitting the Harford Cares Referral Form on OwlNet
- Utilize the Crisis Text Line, Text "Hello" to 741741
- Call the Suicide Prevention Lifeline 1-800-273-8255

3. Take Action

Direct Action

- Be respectful, express empathy, and offer hope.
 - "I'm so sorry. You must be having a really hard time. I know someone who can help."
 - "How about calling the Student Assistance Program? Services are available 24/7. The number is 1-800-327-2251."
 - "Did you know the college offers free remote and on-site counseling? You can call 410-583-2222 to make an appointment."
- Submit a Harford Cares Referral Form on OwlNet

Appendix F: SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Students have 24/7 access to crisis hotline • Strong wellness program within Student Life with variety of opportunities for engagement • Established Center for Excellence in Teaching and Learning for the dissemination of faculty professional development • Students and faculty have access to virtual conferencing software for meetings. • Supportive campus community with Safety Department • Student Intervention Team on campus to assist with reported behavioral concerns • Established process for reporting behavioral concerns to the Student Intervention Team • Employee Assistance Program for faculty/staff • SAP program on-campus and virtually to help with acute mental health issues and/or long-term referrals to appropriate resources 	<ul style="list-style-type: none"> • Counselor is on site only 2 days per week • Faculty/staff are uncertain on the intended use of the behavioral concern form for referring students for help • No health center on campus • No peer-to-peer support program for mental health and well-being • No direct partnership with local mental health services for direct referral when student is in need
Opportunities	Threats
<ul style="list-style-type: none"> • Partnership with SAP – could increase staffing and availability on campus or continue with virtual option for support after COVID-19 pandemic resolution • Crisis Center exists in county – create partnership for referral • Demonstrated faculty and staff interest in supporting student mental health • Numerous Student Organizations on campus – can diffuse the BeVocal model into these organizations • Sexual assault bystander program exists and has momentum 	<ul style="list-style-type: none"> • Continued restriction of in-person campus access due to COVID-19 • Mental health stigma among both students and faculty/staff • Stress and additional responsibilities of employees and students • Sustainability of such a program on campus – willingness for participation and facilitation

Appendix G: Timeline for Implementation

April 2021	<ul style="list-style-type: none"> Submitted documents for IRB approval at Salisbury University and Suburban Community college Met with key stakeholders to inform of planned project for Fall 2021 and gained buy-in
May 2021	<ul style="list-style-type: none"> Formed implementation team Met with Office of Student Life and CETL to determine dates for workshop offerings for Fall 2021. Met with technology department at project site to prepare link and electronic tools (consent form/registration form/GBS tool) for implementation in Fall 2021
June 2021	<ul style="list-style-type: none"> Completed training sessions on the BeVocal model through the University of Texas at Austin in preparation for implementation in Fall 2021
July to August 2021	<ul style="list-style-type: none"> Developed bystander workshop program materials Practiced delivery of workshop program presentation and discussion with key stakeholders at project site
September 2021	<ul style="list-style-type: none"> Implementation and data collection (two student workshops and two faculty/staff workshops offered)
October 2021	<ul style="list-style-type: none"> Implementation and data collection (four student workshops and two faculty/staff workshops offered)
November 2021	<ul style="list-style-type: none"> Implementation and data collection (two student workshops and two faculty/staff workshops offered)
December 2021	<ul style="list-style-type: none"> Implementation and data collection (one student workshop and one faculty/staff workshop offered)
January 2022 to February 2022	<ul style="list-style-type: none"> Data analysis and project evaluation
May 2022	<ul style="list-style-type: none"> Dissemination of results to key internal stakeholders External dissemination of results

Appendix H: Salisbury University IRB Approval

Salisbury University
Institutional Review Board
Committee on Human Research
Phone: (410) 548-3549
Fax: (410) 677-0052
Email: humanresearch@salisbury.edu

IRB Research Protocol Approval Notification

Date: 6/30/21

To: A. Barnes

J. Willey

RE: Protocol #50

Type of Submission: Exempt

Type of IRB Review: Exempt

Protocol is scheduled to begin 8/2021 end 5/2022

Approval for this project is valid from 6/30/2021 to 5/30/2022.

This letter serves to notify Dr. Annette Barnes and Dr. Jeffrey Willey that the Salisbury University (SU) Institutional Review Board (IRB) approved the above referenced protocol entitled, Implementation of a Bystander Program to Enhance Utilization of Mental Health Resources by Students in a Community College Setting on June 30, 2021.

Pursuant to Federal regulations 21 CFR 56.109, the IRB has determined that this protocol qualifies for Exempt review.

Federal regulation 45 CFR 46.103 (b)(4)(iii) requires Primary Investigators (PI), except when a subject is in immediate danger, to assure any change to an approved protocol is not initiated prior to IRB review and approval. Additionally, the PI must also inform the IRB of unanticipated problems involving risks to participants.

Your research is scheduled to begin 8/2021 and end 5/2022. It is the PI's responsibility to submit continuing review reports in a timely manner (at least 3 weeks prior to scheduled end date on the protocol approval).

The SU IRB is organized and operated according to guidelines of the United States Office for Human Research Protections and the United States Code of Federal Regulations and under Federal Wide Assurance No. FWA00020237.

If you have any questions about this review or questions, concerns, and/or suggestions regarding this process, please do not hesitate to contact the Office of Graduate Studies and Research at 410-548-3549 or humanresearch@salisbury.edu.

Appendix I: Organizational IRB Approval (Redacted)

From: [REDACTED]
Sent: Thursday, July 29, 2021 1:48 PM
To: Jessica Powers
Cc: Lindsey Wright
Subject: RE: IRB Application

CAUTION: This email originated from outside of Salisbury University. Please exercise caution when clicking links or opening attachments from external sources.

Hi Jessica,

[REDACTED] Community College's Institutional Review Board has reviewed your research application. In this review, the Committee finds no issue your proposal and the review documentation by Salisbury University. With this notification you are approved by [REDACTED] Community College to engage in your research projects.

Best regards,

[REDACTED]
Vice President for Academic Affairs



[REDACTED]

[REDACTED]

Appendix J: Pre- and Post-Workshop Demographic Survey (2 pages)**Demographic Questionnaire (Student)****Gender:**

Male
Female
Choose not to disclose

Ethnicity/Race:

White
Black
American Indian
Asian
Pacific Islander
Other
Two or More
Choose not to disclose

Age:

18-24
25-34
35-44
45-54
55-64
65 and above

Program of Study:

General Education/Undecided
Arts & Humanities
Behavioral & Social Sciences
Community Education, Business, & Applied Technology
Nursing & Allied Health Professions
Science, Technology, Engineering & Mathematics

Demographic Questionnaire (Faculty/Staff)**Gender:**

Male
Female
Choose not to disclose

Ethnicity/Race:

White
Black
American Indian
Asian
Pacific Islander
Other
Two or More
Choose not to disclose

Role:

Part-Time Staff
Adjunct Faculty
Full-Time Staff
Full-Time Faculty

Academic Division:

General Education
Arts & Humanities
Behavioral & Social Sciences
Community Education, Business, & Applied Technology
Nursing & Allied Health Professions
Science, Technology, Engineering & Mathematics
N/A