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**ADDRESSING STUDENT STRESS: THE IMPACT OF TRAINING ON STUDENT
ASSISTANCE TEAM PRACTICES**

Kaitlin Stanton

A DISSERTATION

In the

Isabelle Farrington College of Education and Human Development

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ADDRESSING STUDENT STRESS: THE IMPACT OF TRAINING ON STUDENT
ASSISTANT TEAM PRACTICES

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ABSTRACT

ADDRESSING STUDENT STRESS: THE IMPACT OF TRAINING ON STUDENT ASSISTANCE TEAM PRACTICES

Kaitlin Stanton

Dr. David Title, Ed.D., Dissertation Chair

This Improvement Science Dissertation in Practice investigated the impact of training and continuous support on the effectiveness of a high school Student Assistance Team's ability to identify and discuss students experiencing high stress levels. In Phase 1 of this action research, the researcher determined the problem of practice to be high stress levels that impacted students' academic, social, and emotional development. After conducting a root cause analysis and the identification of drivers of change, the researcher selected one high leverage practice to implement. In Phase 2, the researcher implemented training and support sessions to foster the Student Assistance Team members' ability to identify students experiencing high stress and implement the Team-Initiated Problem-Solving (TIPS) process during meetings. Using a mixed-methods design, the researcher collected quantitative and qualitative data through individual interviews, focus groups, and Student Assistance Team observations. In addition, the researcher used the Decision, Observation, Recording, and Analysis-II (DORA-II) form to collect evidence during the Student Assistance Team meetings. After the training and support, the data showed that the Student Assistance Team improved its acquisition of new knowledge regarding students with high stress levels. In addition, the Student Assistance Team displayed an increased ability to implement the Team-Initiated Problem-Solving process, leading to a positive impact on the team's functioning. Enhancing the efficiency and effectiveness of the Student Assistance Team is

the first component of providing adequate student support and reducing student stress levels.

Recommended next steps include expanding the Student Assistance Team to include additional stakeholders, evaluating the long-term impact on students, and developing an ongoing training and support method. Future research should include longitudinal studies and the implementation of training and support within other schools to determine if the positive impact translates to other settings and systems.

Keywords: stress, Team-Initiated Problem-Solving Process, student support team, student assistance team

DEDICATION

This Dissertation in Practice is dedicated to those who provided unwavering support and encouragement during the entire process.

To my husband, Steve, your commitment to helping me achieve this goal was beyond what I could have asked for. Thank you for your constant belief in me, your willingness to tackle other responsibilities while I completed this journey, and your never-ending positivity.

To my mom, Deborah, the sacrifices you made so that I could have this opportunity and many others are recognized and appreciated more than you could know. You have always inspired me to push through the challenges, and I could never have accomplished this without you.

To the rest of my family, friends, and colleagues, thank you for your love, patience, and understanding as I dedicated time to completing this pursuit.

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CHAPTER I: THE PROBLEM OF PRACTICE

In recent years, high school students' stress levels have risen, and a higher percentage of students have been diagnosed with anxiety and depression, leading to increased pressure on those who support students in school settings (American Psychological Association, 2014, 2020; Bardhoshi et al., 2014; Horowitz & Graf, 2019). On the American Psychological Association's 2020 Stress in America survey, teenagers and young adults (ages 12–25) reported an average score of 6.1 on a 10-point stress scale, compared to an average of 5.0 reported by adults in 2020 (ages 26 and older). In 2014, the average reported by female teenagers was 5.1, and an average of 4.4 average was reported by male teenagers (American Psychological Association, 2014, 2020). In addition, 34% of those aged 13 to 17 reported that their stress was higher in 2020 than at the same time in 2019. Students stated that academic pressure and thinking about the future were significant causes of stress, especially regarding the COVID-19 pandemic (American Psychological Association, 2020). Students' high stress levels can cause academic difficulties, somatic symptoms, and an increased risk of mental health issues (Horowitz & Graf, 2019; Nandagaon & Raddi, 2020).

While stress can negatively impact students, there are methods students and others can use to reduce the harmful effects of stress. For example, MacCann et al. (2019) found that students who recognize and manage emotions, such as stress, have higher academic achievement. Furthermore, school staff can provide social-emotional learning interventions and support to teach skills such as identifying and regulating emotions, thus improving students' cognitive functioning and emotional well-being (Immordino et al., 2019). This Improvement

Science Dissertation in Practice explored how school staff members effectively identify students experiencing high levels of stress and discuss interventions for students in need of social-emotional support.

Background

Social-emotional learning (SEL) involves students and adults developing the skills and knowledge needed to successfully navigate the world around them. According to the Collaborative for Academic, Social, and Emotional Learning (2021), also known as CASEL, social-emotional learning includes developing important skills such as recognizing and managing emotions, setting and achieving goals, developing positive identities, and making healthy decisions. CASEL, an organization focused on promoting equity and excellence in education, developed five broad categories of competence that educators can integrate into the classroom: self-awareness, self-management, social awareness, responsible decision making, and relationship skills. According to CASEL's framework, self-awareness and self-management competencies include identifying and managing one's emotions and identifying and utilizing stress management techniques (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2021). Learning how to identify and manage emotions such as stress, in addition to developing other social-emotional competencies, can increase students' likelihood of graduating from high school, foster positive social relationships, and enhance students' mental health (Durlak et al., 2015).

While there are many ways to define the phenomenon of stress, most models involve an effect on a person's mental and physical health. While stress can create positive effects as a person is encouraged to build resilience, and as they determine how to work through various situations, if a person experiences high levels of stress for prolonged periods, their psychological

and physical well-being can be negatively impacted (Beattie, 2021; Walburg, 2014). Researchers often cite Lazarus and Folkman's 1984 Transactional Model of Stress and Coping when defining the phenomenon of stress (Feld & Shusterman, 2015). Within this model, Lazarus and Folkman (1984) describe stress as the "particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (p.19). When a person experiences stress, there is an imbalance between their perception of the demands they are facing and their ability to cope with what is happening.

Students can experience academic or school-related stress in which the students perceive the academic demands as exhausting or overwhelming (Walburg, 2014). Ultimately, ongoing stress can lead to burnout, a feeling of low energy, and exhaustion that can affect a person's behavior, thoughts, and judgment (Freudenberger, 1974, 1986). Even though burnout is often studied in adults, students experience the phenomenon as well (Walburg, 2014). A difference between a student's resources and their academic workload, personal expectations of academic achievements, or teacher and parent expectations can lead to school-related burnout (Kiuru et al., 2008).

Researchers have reported increases in students' negative stress over time (American Psychological Association, 2014; Center for Behavioral Health Statistics and Quality, 2018; Horowitz & Graf, 2019; Plemmons et al., 2018). For example, the American Psychological Association released data in 2014 showing that teenagers were experiencing stress at unhealthy levels and with higher rates of stress than adults. At that time, 83% of students stated that their stress derived from school or academic pressures (American Psychological Association, 2014). In addition to rising stress levels, the incidents of students experiencing internalizing issues are also rising. For example, in 2017, the National College Health Assessment data showed that over

60% of students reported experiencing overwhelming anxiety compared to less than 50% of students who had reported anxiety two years prior, while the National Survey of Drug Use and Health (NSDUH) showed an increase from 8% to over 13% of students experiencing diagnosed depression in the same years.

Horowitz & Graf (2019) found that high school students' stress continued to be caused by academic pressure, with image and social status factoring in as other stressors. In addition, the students' stated that their intense stress affected their academic performance and caused somatic symptoms or physical issues such as headaches, stomach issues, and fatigue (Horowitz & Graf, 2019).

Students who live in communities that value achievement tend to have increased stress levels associated with participating in more unhealthy behaviors and fewer healthy behaviors (Milas et al., 2019). When students set goals to achieve their image of a good life, they feel more stress, affecting their behavior (Milas et al., 2019). While stressors such as family illness and conflict with others can affect behavior, researchers found that academic issues or pressures are associated with unhealthy coping strategies (Krafchek & Kronborg, 2018).

Improvement Science in Practice at Willow High School

The researcher utilized an Improvement Science framework to more effectively identify and support students feeling stress because of the imbalance between resources and demands at one high school. In Improvement Science, the scholar-practitioner adheres to these steps: “define problems, understand how the system produces the problems, identify changes to rectify the problems, test the efficacy of those changes, and spread the changes (if the change is indeed an improvement)” (Hinnant-Crawford, 2020, p. 1). The researcher must determine a problem within the organization, how to solve the issue, and if the changes are an improvement. The cycles of

each of these five steps occur quickly, typically within 90 days, as the researcher tests each small change (Hinnant-Crawford, 2020).

To correctly identify and define the problem to be addressed in this Improvement Science Dissertation in Practice, the researcher conducted end-user consultations or empathy interviews. Empathy interviews assist the researcher in understanding the issue from the user's perspective and can be utilized to define the problem, explore systems that affect the organization, and collect data on outcomes (Hinnant-Crawford, 2020). For the first phase, the researcher combined data collected from surveys and observations with the information gathered from interviews with teachers, students, support staff, administrators, and parents to become more informed about the problem and systems influencing the organization.

The research study focused on attempting to improve a complex problem identified within one high school located in a wealthy, suburban town in New England. Willow High School is the only school serving Grades 9–12 in the town, and the school enrolls approximately 1,400 students and employs 125 teachers, with 158 total certified staff members. The certified staff members not classified as teachers serve as administrators, school psychologists, social workers, and library media specialists.

Most of the students at Willow High School demonstrate high academic performance with high average standardized test scores and high acceptance rates to colleges and universities. According to the school profile, the student's average score on the individual sections of the SAT range between 620 and 650, out of a total score of 800; approximately 90% of students earn a score of 3 or higher out of 5 on Advanced Placement (AP) exams—the benchmark for AP course credit at many universities. In addition, approximately 97% of students attend post-secondary educational colleges and universities after graduating from high school (Willow High School

website, 2021).

Willow High School staff members report that the pressure to maintain high standardized test scores and the expectation that students matriculate to a four-year college after graduation contributes to students' stress levels. In addition, school staff members observe high numbers of students utilizing maladaptive coping strategies, such as self-harm, to manage stress, and many students are diagnosed with anxiety and depression. The high frequency of students' maladaptive coping mechanisms and mental health issues may indicate a disparity between the school's mission to provide a safe and supportive environment and the reality of the social and emotional culture within the school.

School administrators report that the staff has attempted to address the concerns regarding students' stress levels and coping strategies in various ways. As a whole-school approach, students in Grades 9–12 began enrolling in Developmental Guidance classes in 2014. School counselors designed the class lessons to address social, emotional, academic, and career development topics—one of the lessons in the series reviews positive stress management techniques. However, counselors maintain that the lesson is ineffective; the counselors have not observed students utilizing the discussed strategies.

Student support team members assert that students who exhibit high levels of stress and lack positive coping strategies are sometimes referred to other levels of intervention, such as meetings with the school social worker, counseling with a school psychologist, or more intensive support through special education or the alternative high school. However, the school staff members report that they do not have a systematic way of identifying students who are experiencing high-stress levels.

The school administrators created the Student Assistance Team (SAT) to have staff members identify and intervene with students needing social, emotional, or behavioral assistance. First, the group members identify students to discuss with the team based on their impressions and interactions with the students; the criteria the individual staff members use to refer students varies. Next, the presenting staff member provides information about the student(s) at the meeting; then, the team discusses interventions.

In the 2020–2021 school year, the school district created a committee to study the systems of identifying students in need of academic, social, or emotional support and the process of implementing scientifically research-based interventions (SRBI) with these students. In an SRBI committee meeting, the assistant superintendent stated that one of the district goals was to update systems such as the Student Assistance Team’s practices.

Statement and Definition

This study identified and addressed the lack of systematic procedures to identify and intervene with students in need of emotional support, specifically concerning high stress levels, at Willow High School. The high school staff, including certified teachers, administrators, school counselors, and psychologists, has recognized the stress and pressure students feel and has tried to address it in various ways. In their efforts to support students, administrators, school counselors, teachers, school psychologists, social workers, and nurses collaborate with one another. However, during empathy interviews, many certified staff members reported feeling that the support systems and interventions can be ineffective for those most in need.

High-Achieving Schools in Relation to Stress

The high school involved in this study and the surrounding community reflect other high-achieving schools as defined by Luthar and Kumar (2018). High-achieving schools are

characterized by high test scores, a college preparatory curriculum, diverse extracurricular activities, and a high percentage of students attending universities after graduation, similar to the school in this study (Luthar & Kumar, 2018). High-achieving schools are also typically characterized by adults in the community who have obtained a college education, work in white-collar professions, and earn higher household incomes. Students in high-achieving schools are at higher risk of having adjustment problems due to pressures of maintaining high levels of achievement (Luthar & Kumar, 2018). Students in high-achieving schools are 6 to 7 times more likely to have anxiety or depression symptoms and 3.5 to 5 times more likely to have physical symptoms or become withdrawn (Luthar, 2019).

In 2020, Luthar et al. found that the constant intense pressure some students feel to perform well falls within the top four high-risk factors for mental health issues. Students in these settings are expected to maintain high scores on standardized tests to keep school rankings high, believing that the school's image depends on students' successes, often increasing students' anxiety about their performance. In addition, many teachers in high-achieving schools hold students to high academic and athletic standards, pushing students to accomplish rigorous goals (Luthar & Kumar, 2018).

Stress at Willow High School

During informal empathy interviews, overall, school staff members reported observing that many of the characteristics of high-achieving schools are present in the school in this study. In materials published by the Board of Education on June 22, 2021, the district described itself as proud of its academic excellence, competitive sportsmanship, and recognition as one of the best high schools in the state. The curriculum includes 24 AP courses and a robust music and art program.

Conversations between students and their peers, students and teachers, as well as students and parents, demonstrate high expectations for achievement and levels of pressure. Students compete for high grades and recognition of achievements in athletics and other extracurricular activities. Counselors report that parents require their students to stay in rigorous honors and AP courses, despite high-stress levels, to remain competitive in the college admissions process. Multiple research participants at Willow High School reported beliefs that teacher ideology could also contribute to students' stress levels as some teachers push students to achieve high academic goals without providing support.

In the spring of 2021, Willow High School students in Grades 9–12 took a survey regarding their mental health and substance use trends. The responsible committee shared the results in the fall of 2021; the survey data showed that 75% of the respondents had felt more stress since the start of the COVID-19 pandemic. Overall, the top stressors included pressure to get good grades and pressure to gain acceptance into a selective college, with 90% of students experiencing stress because of these issues. Students also felt stress related to meeting parent expectations (85% of students) and stress because of the pressure to excel in athletics (70% of students). In addition, most of the students reported elevated feelings of sadness and anxiety, with 20% of students indicating feeling the highest level of sadness and anxiety. Approximately 50% of students said they manage frustration in negative ways, with about one-third of the students in each grade indicating that they drink alcohol to relieve stress. By 12th grade, 50% of the students reported drinking alcohol several times within the past thirty days, with 40% reporting having four or more drinks on each occasion.

In addition to the utilization of negative coping mechanisms, the high expectations placed on students can cause constant levels of stress, often leading to students' fight, flight, or freeze

response (Massachusetts Advocates for Children, 2013). In empathy interviews, counselors and psychologists report that the number of students entering the “freeze” mode has increased, as observed in the increased number of students with declining work completion rates and attendance rates. Teacher referrals to the Student Intervention Team, a group of support staff responsible for Response to Intervention at Willow High School, for diminished student work completion increased by 50% from 2019–2020 to 2020–2021. Specifically, the number of Student Intervention Team referrals within the ninth-grade class increased again from 2020–2021 to 2021–2022. The team received 19 referrals for 9th-grade students during the entire 2020–2021 school year. In the first two months of the 2021–2022 school year, the team had already received 15 referrals for 9th-grade students. The special education department also reported an increase in new referrals. Across all grades, there were 16 new referrals to special education in the entire 2020–2021 school year. In the first two months of 2021–2022, there were 27 new referrals to special education.

Current Efforts to Support Students Experiencing High Stress

As described by research participants, when students show signs of high-stress levels, administrators, counselors, and psychologists sometimes collaborate with the student’s teachers to attempt to lessen the academic pressure the student feels. Furthermore, support staff asks teachers to provide students with accommodations, such as extended time to complete assignments, to alleviate academic pressures. Accommodations can be facilitated informally in conjunction with teachers or formally through a 504 plan or Individualized Educational Plan (IEP). Individualized Education Plans and 504 Plans provide accommodations to those with diagnosed disabilities or medical conditions to foster success in the school setting.

School counselors also provide lessons in stress reduction techniques to the student body through Developmental Guidance classes. Counselors lead seven different groups of Developmental Guidance classes each quarter throughout the school year, and each class comprises four to eight students. The school counselors create developmental guidance lessons to foster students' academic, social, emotional, and post-secondary planning growth. For example, one lesson for each grade level includes information related to emotion identification and management, including stress management specifics for Grade 11; however, counselors report that the lessons are not effective because of the lack of observed student implementation of the strategies discussed.

In addition to small group and individual work with students, parents, and teachers, school staff members can refer a student to a higher level of intervention or support, such as enrollment in the alternative high school or special education. For example, students who need additional support accessing academics because of high anxiety levels are often referred to special education or given a 504 Plan with accommodations such as extended time and breaks from class. In the 2020–2021 and 2021–2022 school years, referrals to special education because of emotional concerns increased, and school psychologists reported an increased frequency of counseling provided through IEPs as part of special education services.

Students in special education who are identified as in need of a higher level of emotional support than individual counseling are referred to the specialized emotional support program. The purpose of this program is for students to receive more intensive mental health services, including individual and group counseling, along with providing a room in the school building where they can go at any time during the day. The emotional support program was full at 25 students in the 2021–2022 school year.

In addition to the emotional support program, the public school district created an alternative high school in 2018. According to a presentation given to the Board of Education, administrators created the alternative school to provide a space for students with health issues and inconsistent attendance. The mission of the alternative school is to prioritize the emotional needs of students, create a strong community, and provide individualized instruction in small group settings. Another goal of the program is to provide a place for some outplaced students to return. According to school staff members, in the first three years of the alternative high school's existence, the school was at capacity every year, leaving some students without the possibility to enroll in the program.

While the school district provides various opportunities for emotional support, if school staff members do not identify students experiencing high stress levels or the appropriate interventions for those already identified, the students do not receive effective assistance. For any students identified as experiencing high stress or other emotional, social, or behavioral issues, staff members can refer them to the Student Assistance Team. However, in empathy interviews, school staff reported that they do not have criteria for referral to the intervention team, and there is no system for how students are identified and discussed at the weekly team meetings. Members stated that the meetings are unstructured and do not often produce actionable solutions. In 2020–2021, a district-wide committee began to review the practices for identifying and intervening with students in need of higher levels of support. The committee's goal for the 2021–2022 school year was to begin to revise the practices of support teams at each school.

During revision planning, the support team identified one of the aims as school staff members being able to identify early warning signs that a student is beginning to develop high-stress levels and know how to intervene to have the student manage their emotions and achieve

academic, social, and emotional growth. In addition, support staff members would be able to teach emotion management skills and stress reduction techniques to the student population and then identify students in need of greater levels of support. Staff members could then accurately select interventions that could be effective for those students needing support.

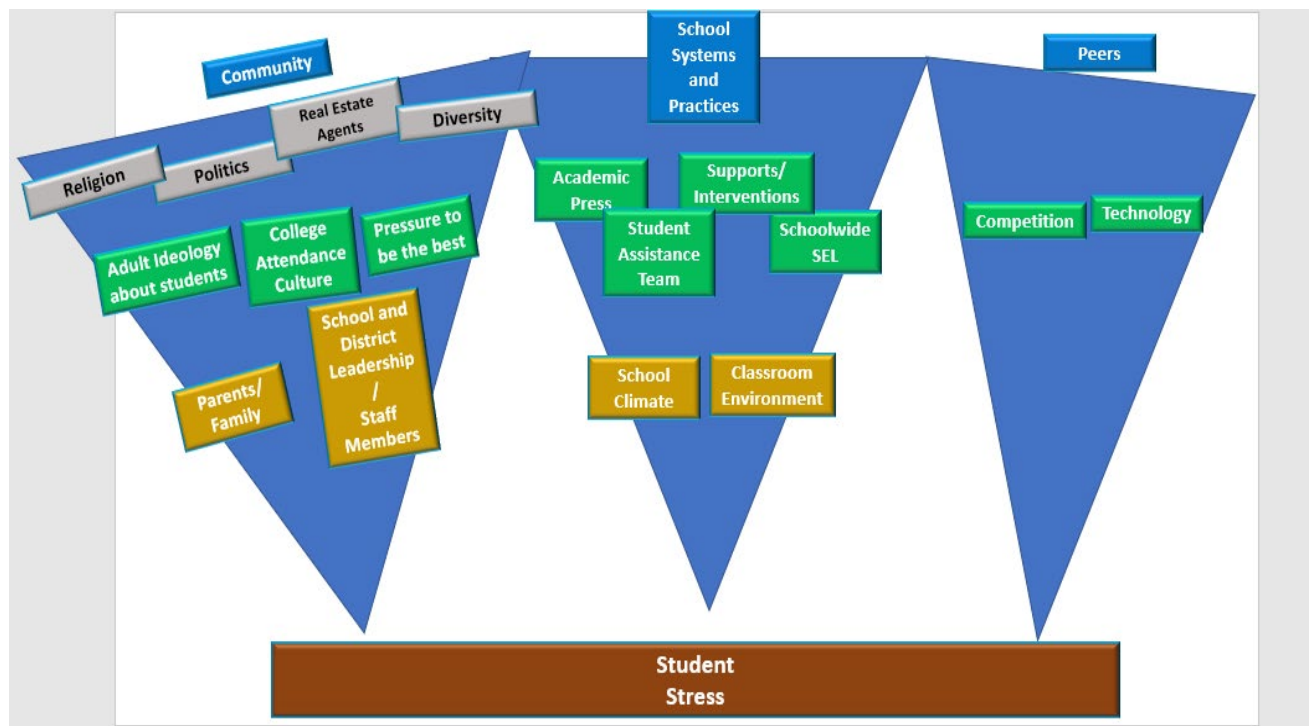
Influencing Systems

This study was completed within a suburban high school in a New England state. Research participants indicated that students within the environment are experiencing high levels of stress, often resulting from feelings of academic pressure. However, as seen in Figure 1, many components of the culture and community can affect students' stress levels and emotional well-being.

Figure 1 depicts intertwining factors that influence students' high stress levels. Each category within the figure includes cascading components that influence the pressure that students feel, with the items closer to the bottom having a more direct effect on students' stress levels. For example, as reported by some of the participants, components of the larger community, such as politics, can lead to the idea that the town's public schools need to meet a determined high level of performance, which depends on students' achievement and college admissions statistics, and influences decisions made by parents and school staff directly affecting students and the stress that they feel.

Figure 1

Systems Map



The broader context of the school community is part of the system contributing to students' stress levels. School staff report that many students feel pressure and stress from attempting to conform to the community standards and expectations. Some students reported feeling stressed because of pressure to adapt to the religion or culture of the majority. Furthermore, students indirectly experience academic and extracurricular pressure from the larger community. Community members, such as politicians and real estate agents, often scrutinize the school district's ratings and student performance. Many feel that student performance can affect school funding and the desirability of living in the town. A report written by the district and posted on the district's website on June 22, 2021, states, "many families move to (the town) for the opportunity for their children to attend the high quality, award-winning school system" (Willow School District website, 2021). Because of the focus on academic and

athletic performance, many students perceive that parents and school staff members make decisions to prioritize achievement over emotional well-being.

As reported by Willow High School counselors, many students and parents emphasize the perceived status of the university a student will be attending, increasing the pressure that students feel to perform well. Likewise, parents and students often consider acceptance at a prestigious university linked with the student's prospect of obtaining desired employment after college.

According to empathy interviews, the school community also reinforces the importance of college attendance after graduation. For example, in the spring of twelfth grade, students are asked to wear their future college's brand apparel, leading to some students' feelings of judgment and self-consciousness, as reported by counselors during interviews. Each spring, the school newspaper publishes the students' names and selected colleges. In addition, the Director of Guidance presents the outcomes of the college admission process each June and often answers questions about the students' admittance rates at Ivy League and other highly selective colleges. The college admittance information is shared with the broader community, and other school staff are often asked questions about the results of the college admissions process as well. These practices and systems can lead to a focus on achievement over emotional intelligence, as well as feelings of competition between peers rather than the development of a peer support network (Geisz & Nakashian, 2018). According to Willow High School counselors, new technology also makes it possible for students to constantly compare themselves to others, whether their appearance on social media or how they compare to other students, as evidenced by college admissions data on the Naviance website for college research.

Overall, school staff members report a lack of focus on building students' emotional intelligence, and the school staff has not developed a comprehensive schoolwide social-

emotional learning program. During end-user consultations, administrators reported that school staff had attempted segregated approaches to social-emotional learning, such as delivering Developmental Guidance lessons and creating an Advisory program. During each of these programs, staff members teach students about positive coping mechanisms; however, counselors reported a lack of student use of the taught strategies.

Students who experience high stress levels and utilize maladaptive coping strategies are sometimes referred for higher levels of support through the Student Assistance Team or special education. However, the Student Assistance Team does not have guidelines for identifying and referring students, and the team does not always recommend interventions. In addition, when interventions are recommended, the team does not have procedures for evaluating the effectiveness of the supports. With the lack of structure and procedural systems, most team members believe it is possible that students experiencing high levels of stress are not being identified and effectively supported.

For those students identified as experiencing more significant emotional needs, the school district staff have created some support structures such as the emotional support special education program and an alternative high school. Struggling students who recognize their need for a different, more supportive environment sometimes ask to be placed in these programs; however, both programs have had waiting lists for availability. As a result, students experiencing high stress levels continue to struggle with the academic demands without effective support, negatively impacting the overall school culture.

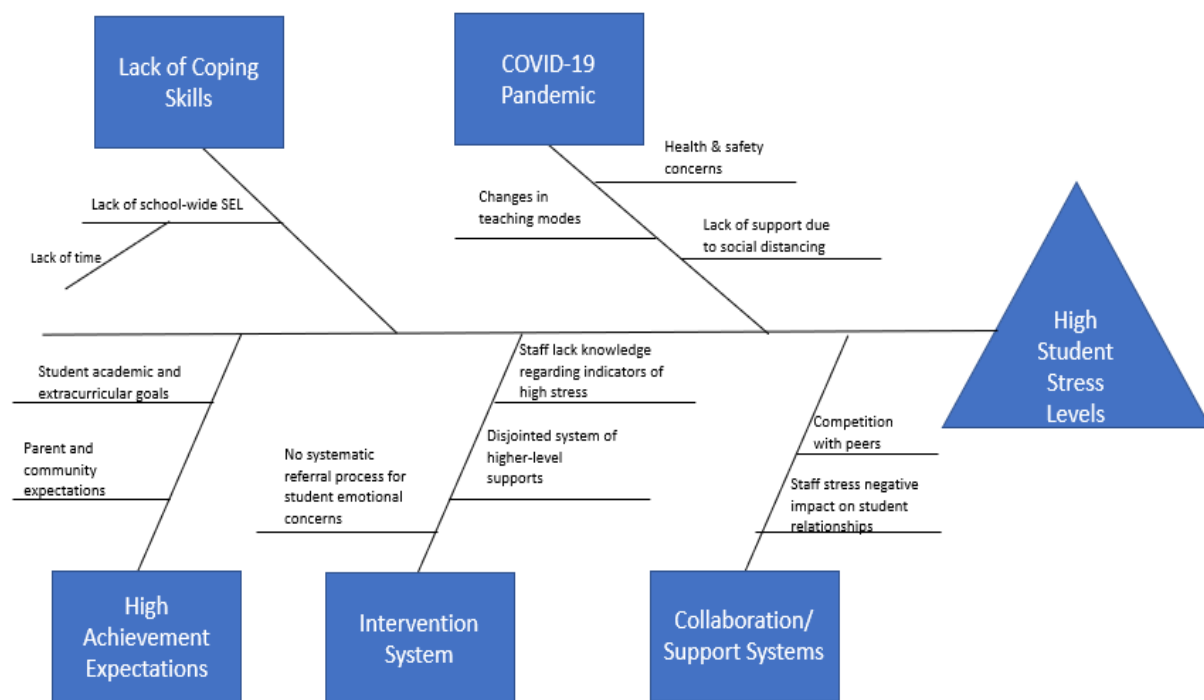
Root Cause Analysis

The researcher completed surveys, interviews, and observations to collect information from stakeholders, including teachers, students, support staff, administrators, and parents, to

determine the root causes of students' stress and maladaptive coping behaviors. The researcher identified several causes of student stress through written teacher reflections, observed conversations and classroom practices, individual interviews, and questionnaires. The causes include many reasons connected to the constant pressure of a high-achieving community lacking appropriate support networks. These causes are displayed through a fishbone diagram in Figure 2.

Figure 2

Fishbone Diagram of Root Causes of Student High Stress



High Achievement Expectations

As evidenced by stakeholder interviews and other data sources, students at the high school are expected to maintain high levels of achievement academically, athletically, and in extracurricular activity competitions. *U.S. News and World Report* consistently identified Willow High School as one of the top three high schools in the state in the eight years prior to this study.

The designation was based on indicators such as the strength of the curriculum and SAT scores. At a Board of Education meeting in 2021, the Willow Public School district's superintendent stated that the high ranking was earned because of students' "hard work and abilities." In addition, community members often highlight other student performance indicators such as sports championships won and club competition placements. For example, one of the high school students placed in the top fifteen in an international high school business club competition in 2021, an accomplishment that school students and staff celebrated.

Many parents expect the high level of student achievement to continue. One example of how these expectations were communicated can be found in the September 8, 2020, Board of Education meeting recording (Willow School District website, 2020). The first 90 minutes of the meeting includes parents speaking during Public Comment to ask the Board of Education to switch from the hybrid model to all in-person meetings sooner than the scheduled date of September 29, 2020. Parents made statements such as, "I moved to this town because the schools are the best; you need to keep them the best" and, "Our children need to be in school to be successful on the end of the year benchmarks." In empathy interviews, staff stated that these kinds of comments fuel the demands placed on students. The high expectations lead to high stress levels in students and staff because many feel that they are expected to continue to perform at top levels in all areas.

COVID-19 Pandemic

While the performance demands placed on students and staff have remained consistent throughout recent years, the COVID-19 pandemic became another stressor for community members causing higher stress levels in students. According to a district-wide staff survey completed in 2020 and student commentary to counselors, many students and staff had concerns

regarding their health and the safety of their families and friends. The abruptly changing mode of education also created stress. Because of the pandemic, the high school fluidly moved between a full in-person model where all students were in the building, a hybrid model where half of the students were in the building while the other half live-streamed into the classroom from home, and a time when all students and staff worked from home. Unfortunately, the technology utilized in remote and hybrid modes did not always work correctly for students and teachers. At the beginning of the 2020–2021 school year, the IT department received an average of 120 help desk tickets per day regarding student and teacher device issues (Board of Education meeting video, 2020).

Beyond the logistical issues, staff members' surveys reported that the constantly changing school model led to staff's decreased knowledge of students' needs, capabilities, and personalities and an inability to form connections between students and teachers. The lack of connection weakened the support system for students previously in place for academic and social challenges. In addition, when students participated in remote learning from home, their engagement level appeared to be lower than when in the classroom. During the first phase of this study, interviews completed with teachers showed that approximately 80% of students turned their camera and microphone off when live-streaming a class from home. In addition, approximately 20% of the students attending class remotely did not respond to written or verbal prompts via the Zoom platform. According to counselor interviews, as students began to return to school in person, teachers expected students to engage in academics and social situations at pre-pandemic levels, creating stress for many students.

As evidenced by union emails, many educators in the district felt that there were also pressures placed on teachers to provide the best education for students so that the high levels of

academic and extracurricular achievement could be maintained. Teachers and counselors reported increased work and personal life demands in the 2019–2020 and 2020–2021 school years and a perceived lack of resources or support to manage the stressors. Teachers’ high levels of stress can negatively affect their relationship with students and their support of students, further exacerbating the issue of student stress (Luthar & Kumar, 2018).

The abrupt change to social dynamics at the beginning of the COVID-19 pandemic and the reintegration of students into social settings throughout 2020–2021 also appeared to foster high stress levels. When the pandemic began, people were asked to stay home as much as possible and exercise social distance to reduce the spread of the virus. The public schools transitioned to a fully remote learning model where students interacted via the Zoom platform and utilized other technology such as Google Classroom to engage in academics. Students were not participating in social settings such as athletics and clubs. According to school counselors, the lack of interaction led to feelings of isolation and stress. When students returned to school in person, feelings of isolation and stress continued because of safety precautions such as mask-wearing and social distancing practices.

Collaboration and Support Systems

The level of collaboration between the teachers and students decreased during 2020–2021. In feedback collected during an Advisory period, students stated that it was hard to approach teachers during the 2020–2021 school year, more difficult to form relationships with teachers, and stressful to always wear masks. The stress level of those in the building appeared to interfere with meeting the school’s mission. In end-user consultations, students reported feeling like they were not engaging in active and collaborative work because of the pandemic restrictions.

Typically, when high school students feel stressed, they can rely on their peers, teachers, and counselors for support. Unfortunately, students felt that those connections and support systems were weakened during 2020–2021. Counselors saw a reduction in the number of students initiating requests for support. Instead, counselors noticed an increase in unhealthy coping strategies, as evidenced by the increase in calls they needed to make to the local crisis center and the increase in chronically absent students from school. The increase in the number of students needing higher levels of intervention created more stress for the counselors, ultimately affecting their relationships with students.

Lack of Coping Skills

Information gathered from empathy interviews showed that the staff believes students reach high levels of stress because of the students' perception of demands without appropriate coping skills. School counselors and psychologists report that students who reach a crisis point cannot identify effective strategies to reduce stress levels. Despite the evident high-stress levels, the school has not yet implemented a school-wide systematic approach to social-emotional learning, which could contribute to students' knowledge of proactive coping mechanisms. In the 2020–2021 school year, the State Department of Education asked schools to focus on social-emotional learning and integrate SEL into teacher goals for the year (State Department of Education Website, 2021). The school district gave the teachers autonomy in this task, and each teacher was able to determine how they wanted to integrate SEL into the classroom. In contrast to the individualized approach, an effective systematic method includes setting schoolwide goals and priorities, implementing consistent programming and approaches in all aspects of the school setting, and assessing student progress (Allensworth & Hart, 2018; Durlak et al., 2015). The Willow High School administrators have yet to take these steps.

Intervention System

In addition to lacking a comprehensive view and approach to social-emotional learning, empathy interviews showed that the school staff does not have a systematic way of identifying and referring students to higher levels of support based on emotional concerns. School administrators previously designed the Student Assistance Team to address students' behavioral, emotional, or social functioning and development concerns. Team members consist of administrators, counselors, psychologists, nurses, social workers, and school resource officers. When one of the team members has concerns or another staff member, such as a teacher, brings concerns to a team member, the student and the situation are discussed at one of the weekly Student Assistance Team meetings. However, staff members do not have a formal criterion or procedure to refer students, and no documentation regarding the concerns and possible solutions is required. The team also does not have a method for referring to those students discussed previously to determine the effectiveness of recommended supports and interventions.

According to empathy interviews, teachers have not received training on warning signs to be aware of and which they should refer to Student Assistance Team members. Because of the lack of structure, some Student Assistance Team members previously did not mention any students' names or situations in the meetings. Other team members used the time to update others on supports they had already independently provided to students, rather than referring or following up on students who still needed support. According to team members, the ineffective use of time led to some participants arriving late or not attending the meetings at all. Staff members reported concerns that school staff may not identify students who need support without a systematic referral process, training on warning signs, and an organized agenda.

Purpose of Study

This study aimed to determine if implementing a research-based system positively impacted identification and intervention effectiveness for Willow High School students experiencing high stress levels. The researcher completed the study using qualitative and quantitative measures to determine the intervention's effectiveness. The quantitative data was obtained through an observation scoring sheet the researcher used during Student Assistance Team meetings. The qualitative data was collected through individual and group interviews to obtain information about the staff's perception of their ability to identify students in need of support as well as the efficacy of the new system and process.

This study was feasible within the given time of three months and the resources within the school. The assistant superintendent started and led an SRBI committee in the 2020–2021 school year. The committee examined current practices and began to learn about academic and behavioral tiered levels of support to begin to revise the practices in the year of the study. The researcher continued to study effective approaches to social-emotional tiered levels of support from August to November of the school year. The researcher trained the Student Assistance Team members in December 2021 and monitored the use of the new practices from December 2021 to February 2022. To adhere to the time limitations, the researcher focused on the first components of supporting students experiencing high stress levels, including identifying students and the procedures used to match them with effective interventions.

Significance of Study

High levels of student stress can lead to issues such as physical symptoms, panic attacks, anxiety, depression, eating disorders, school avoidance, and suicidal ideation (Horowitz & Graf, 2019; Krafchek & Kronborg, 2018; Nandagaon & Raddi, 2020; Ogilvie et al., 2019; Plemmons

et al., 2018). These issues can lead to halted academic, social, and emotional development, making student stress a critical issue to address in schools.

Willow High School has created several support systems, such as the Developmental Guidance courses, Advisory program, emotional support special education program, and the alternative high school. In addition, the school administrators created the Student Assistance Team to foster the identification of students in need of support and provide support to students. However, the district administrators recognize that the Multi-Tiered System of Support process needs revision and identified this as a priority for the 2021–2022 school year.

When school staff members identify students' rising stress levels, they may be able to identify which students may require higher levels of support sooner and potentially reduce the number of students needing intensive interventions for anxiety, depression, and school avoidance, making this study one of high leverage. If the systems and protocols positively affect Willow High School, the information could be utilized as systems are revised at other schools within the district. If effective, low-cost systems can be implemented; it could positively impact the wider education community as other schools and districts could also utilize the same strategies to create positive change for students.

Introduction to Research Methodology and Design

This study provided Student Assistance Team members with training on identifying students in need of higher levels of emotional support. The researcher also revised the process used during the Student Assistance Team meetings to provide structure and foster the identification of interventions that may be appropriate for various student situations. By completing these steps, the aim was that school staff members would be able to identify students

experiencing high levels of stress and effectively discuss appropriate support for students in need.

Research Design

The purpose of this study was to impact the Student Assistance Team members' ability to identify and discuss support interventions for students with high stress, which serves as one component of a multi-tiered approach to reducing Willow High School students' overall stress levels. As part of this Dissertation in Practice, the researcher collected data on the participants' confidence in their ability to identify students needing higher levels of support, as well as their ability to implement the Team-Initiated Problem-Solving (TIPS) protocols during Student Assistance Team meetings.

This study used an action research methodology, mixed-methods design, and an Improvement Science approach. The researcher implemented the Improvement Science cycle of Plan, Do, Study, Act (PDSA) to create a theory of improvement, create change, analyze results, and determine the next steps (Perry et al., 2020). This process aligns with the action research methodology of identifying an issue within the research context and focusing on creating change within that environment (Creswell et al., 2007). Based on previously completed research but with the unique aspect of the context, action research can help close the gap between theory and practice (Ary et al., 2018; Creswell et al., 2007). As with most action research, this study utilized theoretical and practical knowledge to create change ideas and collected both quantitative and qualitative data to assess the effects of the enacted changes.

Target Population and Participants

While the problem of practice concerns stress that students experience and Willow High School staff's ultimate aim is to reduce students' stress levels, this study focused on one driver,

the identification and support of students experiencing the highest stress levels. Therefore, the researcher invited the Student Assistance Team members, the staff group tasked with identifying and supporting students in need, to participate in the study. The Student Assistance Team comprises assistant principals, school counselors, school psychologists, a social worker, and nurses. These staff members work with Willow High School students experiencing high stress levels.

Procedures

The intervention phase of this study began with professional development for Student Assistance Team members and continued with support sessions as the participants incorporated the practices of the Team-Initiated Problem-Solving procedures into meetings. The beginning of the training focused on identifying students experiencing high levels of stress, while the second part focused on procedures used during Student Assistance Team meetings to enhance the effectiveness of discussions. The researcher asked the Student Assistance Team members to incorporate the Team-Initiated Problem-Solving procedures and reflect on the implementation at the end of each meeting. The researcher utilized observations of the meetings and the participants' reflections to plan the support provided during subsequent meetings.

Data Collection Instruments/Measures

The researcher utilized data from observations and individual and group interviews to answer the four research questions. The researcher tracked the implementation of the Team-Initiated Problem-Solving process during Student Assistance Team meetings using the Decision, Observation, Recording, and Analysis-II (DORA-II) form, a valid and reliable measure of implementation fidelity (Algozzine et al., 2016; Morrison et al., 2020). Through this form, the

researcher tracked key elements of the problem-solving meetings and the steps that the Student Assistance Team implemented.

The researcher collected additional data through individual and group semi-structured interviews. The interview questions focused on information about the participants' perceived ability to identify students with high levels of stress, their experience with implementing the Team-Initiated Problem-Solving Process, and their thoughts on how the implementation affected the outcomes of the meetings. In addition, the interviews allowed the researcher to collect information about participants' thoughts and beliefs that were not observable (Martella et al., 2013).

Research Questions

These four research questions were investigated as part of this study:

1. To what extent does whole group professional development, with ongoing monitoring and support, increase Student Assistance Team members' perception of their ability to identify students experiencing high levels of stress? Why?

2. With whole group professional development and ongoing monitoring and support, to what degree does the Student Assistance Team implement the Team-Initiated Problem-Solving structures and processes with fidelity when identifying and discussing interventions for students with high stress levels? Why?

3. In what ways does the implementation of the Team-Initiated Problem-Solving process affect staff members' perception of the effectiveness of the Student Assistance Team?

3a. What components of the Team-Initiated Problem-Solving process were most effective and why?

- 3b. To what extent does implementing the Team-Initiated Problem-Solving process lead to more effective outcomes for the case presented, and why?
4. What elements of professional learning and support were most effective and why?

Data Analysis Methods

This study analyzed the impact of changes to the systems used to identify and intervene with students experiencing high stress levels. The researcher analyzed data from the DORA-II form used to track Student Assistance Team meetings observations and data from individual and group semi-structured interviews. By analyzing the fidelity scores from the DORA-II after each meeting, the researcher studied the implementation of the Team-Initiated Problem-Solving process over time. The researcher also analyzed the qualitative information by coding the participants' interview responses. Finally, the researcher identified themes and compared the results to the analyzed quantitative data to inform decisions about how the district can continue to support students experiencing high stress levels.

The Researcher and the Problem

The researcher's position within the district and the Student Assistance Team has the potential to impact the research. The researcher is a school counselor at Willow High School and actively works to support students' academic, social, and emotional development. Her role involves working with students experiencing high stress levels, and she is a member of the Student Assistance Team. The study participants are her colleagues with whom she works daily, which may increase the participants' comfort level with participating in this study and aspects of the data collection process such as observations.

As part of the researcher's employment in the Willow School District, she was a member of the district SRBI committee in the school year 2020–2021. Therefore, she began to study the

identified problem of practice through that lens of 2020 and approached the problem with the background and experiences similar to Willow High School students. The researcher grew up in a predominately White, high-socioeconomic town and attended schools that could be classified as high-achieving, where the community placed a significant emphasis on acceptance to competitive colleges. Because of the researcher's background, she can empathize with and relate to the students enrolled in Willow High School.

Definition of Key Terms

Anxiety – Excessive worry that lasts for a prolonged period and can lead to restlessness, fatigue, difficulty concentrating, and sleep interruptions (American Psychiatric Association, 2013).

Burnout – Feelings caused by prolonged periods of stress that lead to a constant state of low energy and exhaustion that can affect a person's behavior, thoughts, and judgment.

Depression – Mood disorder associated with prolonged periods of sadness and loss of interest in activities.

Internalizing Disorders – Disorders related to distress such as anxiety, depression, and somatic symptoms (American Psychiatric Association, 2013).

Multi-tiered Systems of Support – Tiered model of support for students that involves instruction and decision-making informed by assessments in academic and non-academic areas.

Response to Intervention – System designed to identify and provide early academic intervention to struggling students, typically involving three tiers of increasing levels of support.

Social-Emotional Learning – The development of skills and knowledge related to self-awareness, self-management, social awareness, responsible decision making, and relationship skills (Collaborative for Academic, Social, and Emotional Learning, 2021).

Somatic Symptoms – Physical feelings of pain such as headaches, stomach issues, and fatigue that can lead to issues in functioning (Horowitz & Graf, 2019).

Stress – The imbalance between a person’s perception of the demands they are facing and their ability to cope with those demands (Lazarus & Folkman, 1984).

Student Assistance Team – Collaborative approach in which a school-based team of educators identifies and works to support students struggling in academics, social, emotional, and behavioral areas.

Conclusion

In the first phase of this Improvement Science Dissertation in Practice, the researcher conducted empathy interviews and observations to identify a problem of practice within Willow High School. After determining that staff members considered students’ high-stress levels an important issue, the researcher engaged in a root cause analysis. The analysis showed that the Willow High School students’ stress levels are influenced by schoolwide systems and practices as well as the community. Within the school, influences of stress include high achievement expectations, a lack of students’ coping skills and support systems, and the COVID-19 pandemic. To determine how high levels of stress affect students and how to address stress in schools, the researcher moved from the root cause analysis to the next phase of the study, which included a literature and practice review.

CHAPTER II: LITERATURE AND PRACTICE REVIEW

Many school personnel have recently observed increased student stress levels (American Psychological Association, 2014, 2020; Horowitz & Graf, 2019). Therefore, the focus of this study—identifying and supporting students experiencing high stress levels—was selected after the researcher engaged in empathy interviews conducted with staff members at Willow High School.

This second chapter presents information about the impact of students' high stress levels and related internalizing disorders. The additional two sections within the chapter discuss the influences of adult actions on student stress and interventions that school staff utilized to reduce student stress. The researcher gathered the information through a literature review process and conducting environmental consultation interviews.

In an Improvement Science Dissertation in Practice, literature helps to contextualize problems of practice, create theories of improvement, and frame the analysis of the data collected during the process (Perry et al., 2020). Environmental interviews can also help to form a theory of improvement. Therefore, the researcher conducted semi-structured environmental interviews with school administrators to gather information on student stress and support in practice. The environmental consultants were selected based on their knowledge of student stress and interventions implemented at schools similar to Willow High School. All consultants hold leadership positions within their school and have a role in identifying and supporting struggling students, so they could provide detailed information on the topic of this Dissertation in Practice. The information gathered from a school principal, Director of Guidance, and Director of Pupil

Services at three different schools is in the sections on the impact of stress on students, adult practices that influence stress levels, and interventions utilized in schools to reduce students' stress levels. The interview questions are in Appendix 3.

After reviewing the literature and knowledge from practice, the researcher utilized the knowledge to form the intervention she implemented at Willow High School. Chapter 3 contains the intervention, research procedures, and data analysis methods.

Impact of Problem on Students

Anxiety and stress can invoke an emotional response to worry, concern, or fear (Sweeney & Pine, 2004; Taty, 2020). Anxiety and stress can be displayed through thoughts, behaviors, emotions, or physiological reactions (Aydin, 2017; Morris & March, 2004; Ollendick & March, 2004; Silverman & Treffers, 2001). Students' stress can increase over time and stem from various causes such as low self-confidence, academic challenges without appropriate support, family issues, or peer conflict such as bullying (Knollmann et al., 2010; Sari et al., 2018; Wuthrich et al., 2021). Students who experience high levels of competition with peers, stress related to the rigor of courses, and perceived failure after earning a grade less than an A, were particularly susceptible to developing unhealthy coping strategies (Krafchek & Kronborg, 2018).

Similar to other researchers, Nandagaon and Raddi (2020) found a correlation between academic stressors, such as the amount of homework assigned and perceptions of low academic performance, and maladaptive coping strategies or mental health issues, specifically depression and suicidal ideation. However, positive coping mechanisms that counteract academic stress exist; Taty (2020) found that confiding in friends and the strength of students' relationships with peers can counterbalance feelings of stress.

Other Internalizing Disorders

Much like students with high levels of stress and anxiety, students with depression often reported that their academic work was affected, their ability to perform other life functions decreased because of the illness, and they had a higher frequency of suicidal thoughts (Feld & Schusterman, 2015; Plemmons et al., 2018). In addition to the increase in diagnoses of anxiety and depression, the number of students hospitalized because of suicidal ideation or attempts has risen dramatically, doubling between 2005 and 2015 (Plemmons et al., 2018).

Signs and Symptoms of Internalizing Disorders

Students with high stress levels and internalizing disorders can display various signs and symptoms while developing maladaptive coping strategies (Milas et al., 2019). As a result, students may experience difficulties in social, emotional, and academic arenas (Nail et al., 2015).

Students experiencing high stress levels and lacking positive coping skills in the academic realm demonstrate weaker academic performance (MacCann et al., 2019). Academic functioning, including concentration, reading fluency, oral presentations, and performance on assessments, may be impacted (Nail et al., 2015). Students with high stress also may engage in behaviors, such as school avoidance, that negatively impact their academic achievement. School avoidance affects students' regular in-person attendance and, therefore, the student's academic, social, and emotional development (Davis et al., 2019).

Academic difficulties and anxiety are often cited as the most prominent causes of school absences (Heyne et al., 2019; Knollmann et al., 2010; Ogilvie et al., 2018). Even in students with a primary diagnosis such as depression, adjustment disorder, or family conflict, underlying anxiety was connected to school avoidance (Ogilvie et al., 2018). When students feel high levels of stress, they can exhibit physical symptoms, such as headaches, dizziness, nausea, and stomach

pain. The students may report these physical symptoms as the cause of school attendance issues; however, the cause may instead stem from high-stress levels (Knollmann et al., 2010).

Some symptoms may be more noticeable outside the classroom setting or to different school staff members. Additional signs of students experiencing high levels of stress include social difficulties, withdrawal, changes in friend groups, and somatic issues such as back pain and neck issues (Feld & Schusterman, 2015; Greif Green et al., 2017; Jones & Suveg, 2015; Torres-Rodriguez et al., 2010). Students may also experience exhaustion, sleeping issues, and a lack of concentration or ability to start work (Feld & Schusterman, 2015). In addition, students' dispositions may change with mood swings, irritability, restlessness, anger, aggression, and anxiety or panic attacks (Feld & Schusterman, 2015; Grief Green et al., 2017). Students who have more than one symptom of high stress levels may need more support than those who exhibit fewer symptoms.

Identifiers of Students' High Stress

The portrayal of different symptoms can make it difficult for school staff members to identify students absent because of physical illness instead of students who are absent because of the physical symptoms of stress and anxiety. School staff members, such as nurses and school counselors, serve in roles that provide opportunities to analyze students' physical and emotional well-being and examine the effects on a student's academic achievement (White, 2010; Williams et al., 2021). As students experience negative effects of stress, the school-based counselor often becomes involved because school counselors' role includes supporting students' mental well-being and academic achievement (American School Counselor Association, 2012). Counselors often work with other school staff members such as teachers, school psychologists, school social workers, administrators, nurses, and paraprofessionals to support students. Beyond identifying

students who may need more support, school staff can select an intervention based on the causes of the student's difficulties and assess the effectiveness of an intervention (White, 2010; Williams et al., 2021).

Student Stress in Practice

The professional knowledge gained from the environmental consultation interviews supported the information found in the literature review. All the environmental consultants indicated a significant increase in students' stress levels. High School Principal stated that students appear to be completely overwhelmed by the stress and anxiety they are experiencing. Director of Guidance noticed the trend in increasing student stress levels over the past five to ten years; however, he stated that the COVID-19 pandemic affected students differently for the past two years, and this school year, it seems like stress levels are even higher.

The students' high stress levels are exhibited differently across the schools. High School Principal stated that one of the most prominent quantitative indicators school staff reported regarding the increased stress levels is the number of students flagged by the school's online tracking system this year. The Google platform monitors students' work, and any indications of risk are immediately conveyed to school administrators. In addition, high-stress levels and associated behaviors of concern have been found in students' college application essays and assignments such as English class essays and journals. Another indicator of rising stress levels was drawn from the number of referrals to a school-based support team that the Director of Pupil Services oversees. Typically, the school has 40 referrals a year, and the Director of Pupil Services had already received 60 referrals in the first two months of school.

Director of Guidance also stated that the school staff had seen more students at the significant crisis level this year than before, while many other students are exhibiting increased

stress levels and signs of needing support, but they have not yet reached a crisis point. Those students the staff identify as being in crisis are experiencing self-harm thoughts and actions, suicidal ideation, and suicidal attempts. Other students frequently visit the school's Guidance Office because they have difficulty successfully navigating their school day. Director of Guidance reflected that it is difficult for staff members to support such a large number of students facing high levels of pressure.

Overall, the literature and professional knowledge indicate that stress levels are rising, and students struggle to cope positively. Unfortunately, the high stress levels are negatively impacting students and their development, as well as their daily functioning. The next section expands on the adult actions in school and the community that impact students' stress levels and coping abilities.

Adult Actions Related to the Problem of Practice

Adults in the school and the community can negatively or positively affect students' stress levels (Kulakow et al., 2021). When teachers and parents set high expectations without providing appropriate support, students can feel overwhelmed, stressed, and intense fear of failure (Deb et al., 2015). How schools support students, including the climate and culture fostered, can also affect students' stress levels (Osher & Berg, 2017). A positive school climate comprises welcoming, safe spaces where students are connected and engaged in learning (Durlak et al., 2015). For students experiencing high stress levels despite a welcoming school climate, school staff members can take steps to identify those students and refer them to appropriate support (Alsalamah, 2021). If the identification and referral processes are ineffective, students may not be provided with the necessary interventions.

Identifying Students with High Levels of Stress/Internalizing Disorders

Schools typically have systems in place to identify students who are struggling academically, behaviorally, socially, and emotionally so that the school can provide appropriate support. However, schools often identify students with high stress and internalizing disorders less often than those with externalizing disorders (Splett et al., 2018). Students with internalizing issues are often not identified and supported; when students are not identified, and their difficulties are not addressed, it can significantly impact their academic, social, and emotional development (Cook et al., 2015).

A substantial number of students in kindergarten through twelfth grade who meet clinical levels of internalizing disorders are not identified (Flett & Hewitt, 2013). Unfortunately, students disguise their stress for many reasons, leading to the under-identification of students experiencing high stress levels (Splett et al., 2018). Students may feel as though peers, teachers, and family members can stigmatize them, and they also may feel pressure to produce the perfect outward image to meet adult expectations (Flett & Hewitt, 2013). Especially in high-achieving communities, students may exhibit the need to appear perfect or indicate that mistakes do not happen to them (Kulakow et al., 2021). Public speaking or presentations can be particularly stressful because of feelings of peer and teacher judgment (Flett & Hewitt, 2013). In addition, peers can influence students' decisions and behaviors through social media as students develop comparisons and hide their true feelings. Social media usage can lead to superficial attachments and loneliness, all contributing to feelings of heightened stress (Flett & Hewitt, 2013).

Adolescents with internalizing issues are not referred to school support systems as frequently as anticipated, also reflected in services provided (Cook et al., 2015; Splett et al., 2018). There is an imbalance between school services provided for externalizing and

internalizing issues stemming from referral rates (Splett et al., 2018). In one study performed with children, teachers could only accurately identify 50% of students with depression and 41% of students with anxiety (Cunningham & Suldo, 2014). Teachers in the study missed the symptoms of internalizing disorders, and 84% of the teachers reported having no training or professional development in mental health issues. Recommendations from multiple studies include improving the identification, referral, and intervention steps taken for students with internalizing disorders (Cunningham & Suldo, 2014; Splett et al., 2018).

Referral to School-Based Assistance Teams

Students identified as experiencing high levels of stress or other emotional concerns can be referred to school-based assistance teams even though most prior research has focused on academic-based support teams (Saeki et al., 2011; Torres-Rodriguez et al., 2010). Student assistance teams have taken many forms throughout history. The first record of “teacher assistance teams” came from 1979 and involved a problem-solving process in which the group focused on academic instruction as a pre-referral step in the special education process (Alsalamah, 2021).

There are multiple assistance models in schools, including the consultation model, problem-solving model, and tiered support model (Alsalamah, 2021). The consultation model involves the teacher or parent, or both, receiving guidance regarding interventions enacted in the classroom or at home (Schürmann et al., 2021). This support is typically given by a staff member such as a special education teacher or school psychologist. The process involves the teacher or parent requesting a consultation, discussing the problem and solutions, and having follow-up meetings after the intervention is implemented. If the intervention is ineffective, other solutions are attempted while collecting data on the student’s progress.

The problem-solving model involves teams collecting and analyzing data and includes more behavioral issues and solutions than focusing on academics as the consultation model (Alsalamah, 2021). The steps of the problem-solving model include identifying the problem and creating an operational definition, determining the underlying cause, developing solutions, implementing the intervention, and monitoring and analyzing the data that are gathered (Bahr et al., 2020). The intervention can be implemented by anyone on the team, not necessarily the classroom teacher, and the intervention can be modified as needed (Alsalamah, 2021).

The tiered support model is a prevention and intervention model which typically consists of three tiers of support, increasing in response level as the tiers increase (Alsalamah, 2021; McKenzie, 2009). Common tiered support models include Response to Intervention, typically used for academic support; Positive Behavioral Interventions and Supports, used for behavior support; and the Multi-Tiered Systems of Support, which integrates behavioral and academic supports. Overall, the tiered support model of prevention and intervention supports students' social, emotional, and academic well-being and development (Torres-Rodriguez et al., 2010). The process typically includes identifying students of concern and providing support to students and families; however, the process has also served as a step in the referral to the special education process (Reynolds & Shaywitz, 2009; Torres-Rodriguez et al., 2010).

Not all student assistance teams are currently working effectively (Rosenfield et al., 2018). However, many teams believe they are more effective and productive than studies demonstrate (Crone et al., 2016). For example, 44% of schools in a study completed by Crone et al. (2016) reported having systematic processes for academic interventions; however, 8% of the discussions led to academic support outcomes. Approximately 40% of the schools reported having a process for behavioral concerns; however, 12% of schools engaged in a systematic

process for discussing behavioral concerns. In observed discussions, most teams utilized quantitative data for academic concerns and qualitative data for behavioral concerns (Saeki et al., 2011). The researchers state that schools could improve their process for identifying and supporting students if staff members used both qualitative and quantitative data for all concern types (Crone et al., 2016; Saeki et al., 2011).

There are several barriers to successfully implementing student assistance team models to support students effectively. School psychologists report a lack of time to implement processes with fidelity as their greatest concern (Fan et al., 2016). In addition, staff members report not having enough resources to implement interventions, particularly at the middle and high school levels (Algozzine et al., 2016). In one study, less than 30% of participants stated that they had adequate resources (Fan et al., 2016).

Beyond the concerns of time and resources, there is a lack of knowledge of what works for certain populations. For example, only 6.7% of studies completed regarding Response to Intervention have been implemented with students of high socioeconomic status, 53.3% of the studies included White participants, and 42.8% of the completed studies involved adolescents (Arora et al., 2019). In addition, because of the lack of shared knowledge of effective student assistance team models, as well as a lack of shared goals and buy-in, rules, and procedures, many teams are not functioning at the highest level possible (Fan et al., 2016; Rosenfield et al., 2018).

Another possible barrier to effective student assistance teams is a lack of implementation integrity (Fan et al., 2016; Rosenfield et al., 2018; Weist et al., 2018). For example, Algozzine et al. (2018) found that providing a structure and a process to a team does not indicate that the team will utilize that information and effectively implement systems. Another study showed that training did not affect implementation integrity (Rosenfield et al., 2018). Unfortunately, these

studies did not include information about what bolsters school implementation integrity.

Researchers have developed many ways to assess the fidelity of the implementation of student assistance team models (Algozzine et al., 2016). Measures include the Schoolwide Evaluation Tool, Benchmarks of Quality, Benchmarks of Advanced Tiers, Individual Student Systems Evaluation Tool, and the Tiered Fidelity Inventory (Weist et al., 2018). In addition, researchers recently developed and recommended the Tiered Fidelity Inventory tool; however, it has a heavy focus on positive behavioral interventions and supports systems and can be time-intensive to complete (Miller et al., 2015; Sugai & Horner, 2020).

Adult Expectations of Performance

Parents and school staff members can influence stress levels in students. One study showed that 66% of students felt that pressure from parents was the primary cause of academic stress (Deb et al., 2015). Both academic performance and parental pressure can affect students' feelings of short-term and long-term stress (Kulakow et al., 2021). Parents and teachers are aware of the pressure they place on students; however, one study found that parents and teachers believe that they do not know how to change the culture (Spencer et al., 2018).

The pressure that parents and teachers place on students can stem from multiple places. Teachers and parents may feel judged by others on how their students perform, affecting how the adults interact with the students (Spencer et al., 2018). Because of the judgment that parents feel in the community or by others, parents sometimes criticize their children's performance compared to others, especially in high-achieving communities leading to rivalry among students (Deb et al., 2015). A study completed by Spencer et al. (2018) confirmed that the pressure students feel to perform better than other students leads to competition in academics and extracurricular activities rather than fostering a supportive climate. The pressure related to

academics, athletics, and the arts can lead to students feeling unable to cope with expectations, high levels of stress, and anxiety or emotional despair (Deb et al., 2015).

High levels of pressure and stress can have negative impacts on students. Parent pressure is positively correlated with academic stress and psychiatric disorders, negatively impacting students' achievement (Deb et al., 2015). However, students experiencing high levels of pressure can also develop perfectionistic tendencies (Spencer et al., 2018). The desire to achieve high goals, and the pressure that coincides with that, can build as students approach the college admissions process. Students in high-achieving communities can feel pressure to be admitted to selective colleges, with the image that particular colleges lead to a successful future. Teachers and parents can feel increased pressure to prepare students well because college admissions has become more selective (Spencer et al., 2018). However, if parents are supportive, students' stress levels can decrease (Kulakow et al., 2021).

School Climate

While parent and teacher pressure is linked with stress, if students have strong relationships with others in the school community and a sense of belonging, they are more likely to have good coping skills, stronger interpersonal communication abilities, and a sense of being supported (Abdollahi et al., 2020). In addition, when students can develop relationships, have a support system, and feel a sense of belonging, there is a positive climate within their school (Durlak et al., 2015).

Because school climate is a complex construct, there are many definitions (Durlak et al., 2015). For example, some describe school climate as the “physical, academic, social, and disciplinary environment,” which includes the “culture, norms, goals, values, practices, characteristics of relationships, and organizational structures” (Osher & Berg, 2017, p. 3).

However, others describe school climate as a construct that includes school structures, organizations, and relationships (Durlak et al., 2015). Across definitions, though, essential components of a healthy school climate include academic engagement, physical safety, cultural responsiveness, and academic challenge with supportive relationships (Durlak et al., 2015; Osher & Berg, 2017). Moreover, researchers consider strong, healthy, trusting, respectful relationships one of the most important aspects of a positive school climate (Osher & Berg, 2017).

A positive school climate, and the integration of healthy environments with social-emotional learning, can benefit students where they tend to experience healthier development and stronger well-being (Osher & Berg, 2017). These positive environments can foster a place where students' resilience and coping abilities are strengthened, leading to reduced stress levels (Abdollahi et al., 2020). On the other hand, researchers have found a negative relationship between students' sense of belonging and stress levels (Abdollahi et al., 2020). If students feel as though they belong to the community, they have reduced rates of depression, more self-confidence, and better social skills (Osher & Berg, 2017; Durlak et al., 2015). Researchers have also found a link between a positive school climate and academic achievement (Durlak et al., 2015).

Adult Actions in Practice

Professional knowledge of current events in the field showed similarities and differences from previous research findings regarding adult actions that positively or negatively impact students' stress levels. Across all the high schools involved in the environmental consultations, the most frequently cited source of stress was the pressure students felt to achieve high academic marks and perform well in extracurricular activities to gain admission to a highly competitive university. An added stressor that all the high school administrators discussed was the pressure

that students felt as they returned to a more normal state this school year after two years of pandemic disruptions. Expectations were altered to account for the stress students experienced because of the COVID-19 pandemic over the past two years. This year, teachers, coaches, and other school staff members have reinstated the goals and objectives they held for students before the pandemic began, and the school administrators stated that students are having a hard time adjusting back to the high expectations.

In addition to the pressure that students feel to perform at high levels, the school administrators spoke about other influences of stress. For example, High School Principal spoke about how teacher grading practices can affect students' approach to school and, therefore, impact students' stress levels. Summative assessments account for 90% of the students' grades within the principal's school, so many students experience anxiety and stress surrounding these large measures of mastery of academic content. Director of Guidance also spoke about other stressors, such as family and friend dynamics, as well as the uncertainty of what is to come. Overall, Director of Guidance stated that it is difficult for school staff to identify students who are experiencing high stress levels, and it can sometimes feel as though staff can never do enough to support the students fully.

While common themes such as pressure from teachers, parents, and community members were seen across the literature and professional knowledge, there were also differences. For example, some school administrators briefly mentioned healthy student-staff relationships; however, none of the participants explicitly spoke about how school culture can affect students' mental well-being. The high school administrators may recognize that school culture and climate can impact students' stress levels, but it may not be at the forefront of what the professionals see daily or their focus in working with students. Instead, most of the administrators spoke about a

focus on identifying and supporting students who were experiencing a crisis because of stress and other internalizing disorders.

Working Theory of Improvement

In the first phase of this Improvement Science Dissertation in Practice, the researcher conducted a root cause analysis to determine the causes of stress in students at Willow High School. The root cause analysis showed that Willow High School students were experiencing stress concerning high adult expectations, which students sometimes viewed as unattainable, competition between students, the effects of the COVID-19 pandemic, a lack of appropriate coping skills, and a system of supporting students that needed strengthening.

These findings coincide with what researchers have shown to be true through other studies, such as stress caused by academic challenges and the rigor of classes without appropriate support, peer conflict, competition, and perceived achievement levels (Knollmann et al., 2010; Krafchek & Kronborg, 2018). Furthermore, high levels of student stress can lead to difficulties with social, emotional, and academic growth and development, as well as the use of maladaptive coping strategies (Nail et al., 2015).

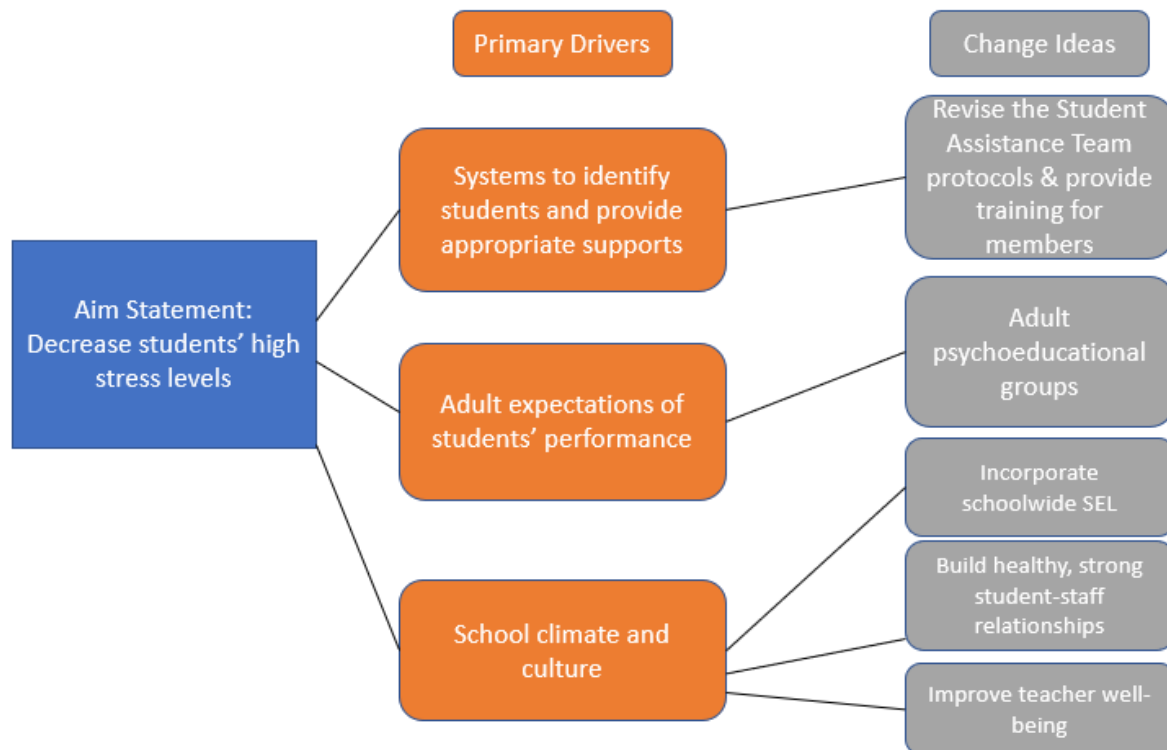
Researchers have previously examined several school-based responses to students' stress and subsequent maladaptive coping strategies. For instance, cognitive-behavioral therapy, a strategy that focuses on changing patients' thoughts and developing coping mechanisms, has been examined frequently (Reissner et al., 2015). Some study results have indicated positive effects of cognitive-behavioral therapy, especially for students participating in in-patient treatment (González-Valero et al., 2019; Knollmann et al., 2010). However, other researchers have not found a significant difference between cognitive-behavioral therapy and other treatment types (Reissner et al., 2015). In addition, other researchers have found that teaching meditation

and mindfulness practices can be helpful for students attempting to manage anxiety and depression (González-Valero et al., 2019). Likewise, other resiliency-building factors, such as creating social networks, can positively impact students, particularly their attendance at school (Sobba, 2019). Balfanz et al. (2007) also found that teacher training could positively affect attendance issues that lead to students' withdrawal from high school when that training is combined with changes in instructional programs, such as the addition of math and reading support labs. However, Balfanz et al. (2007) did not specifically examine how the interventions could affect identified students with low attendance rates regarding mental health issues.

The information about addressing stress within schools that the researcher gathered from the literature and practice review led to identifying ways that those at Willow High School could address the problem of practice. In Improvement Science, drivers are related to the causes of the problem of practice and connected to levers of change, which are points of entry for impacting the issue. Driver diagrams show where those involved can leverage change to impact the problem of practice (Perry et al., 2020). For example, the driver diagram in Figure 3 depicts several areas that could be impacted to make potential improvements to Willow High School students' stress levels.

Figure 3

Driver Diagram



The driver diagram depicts multiple avenues of change that may affect the identified issue—for example, those involved at Willow High School aim to decrease students' high stress levels. Change ideas corresponding to each driver are depicted in the diagram and include addressing the systems used to identify and provide support to struggling students, adjusting the student pressure around adult expectations, and bolstering the school climate and culture (Abdollahi et al., 2020; Cook et al., 2015; Kulakow et al., 2021). While it is not possible to change the COVID-19 pandemic restrictions and guidelines or some of the students' other stressors that come from the system and culture of the community, this study attempted to increase staff members' ability to systematically identify students experiencing high stress levels

so that staff could provide interventions and support to those students. Furthermore, the study focused on just one change idea based on human resource capacity and time-bound project constraints.

Change Ideas

Specific strategies to affect change in the areas of the identified drivers are drawn from clinical approaches to mental health, social-emotional learning programs, and best practices related to school culture and climate. For example, at Willow High School, points of impact could include changing adult expectations and the pressure placed on students through adult psychoeducational workshops, improving the school climate to give students and staff an environment where they feel they belong and are supported. In addition, integrating social-emotional learning that includes stress reduction techniques on a school-wide basis and developing a more effective student support system by increasing the staff's ability to identify, refer, and provide interventions for those experiencing high stress levels can further support stressed students.

Adult Psychoeducational Groups

Parents' thoughts and behavior can impact students' development and well-being. Parents' stress levels and the strength of their relationship with their child can affect the mental health and the severity of the child's anxious symptoms in response to stress (Platt et al., 2016). The stronger a parent-child relationship is, the more resilient the child becomes (Edwards et al., 2016).

With parents' strong impact on students, some schools have developed parent educational workshops and presentations. By providing adult psychoeducational workshops, school employees can educate parents on how their behavior and expectations affect students, as well as

work towards reducing parent stress and feelings of competition, which would positively impact students as a result (Burgdorf et al., 2019; Chaplin et al., 2021). Studies have shown that parent groups that focus on the adult's well-being or parenting information can be effective. Parent well-being workshops have incorporated mindfulness strategies and techniques, which have led to reductions in parent stress and improved student outcomes (Burgdorf et al., 2019). Another study completed by Chaplin et al. (2021) also showed that mindfulness programming could increase parent mindfulness, reduce parent stress, and improve parent-child relationships.

In addition to reducing stress through mindfulness activities and directed interventions, parent education programs can reduce stress and positively impact students. For example, in one study, parents attended ten learning sessions that focused on how to support students struggling with mental health and included child development information (Kang et al., 2019). By the end of the study, parents' stress levels reduced significantly, and potential positive impacts on students were found.

Schoolwide Social-Emotional Learning

According to the Collaborative for Academic, Social, and Emotional Learning (CASEL), social-emotional learning relates to building knowledge and skills to manage emotions and reach goals (CASEL, 2021). Some researchers have found that the most effective way to support students is through schoolwide climate programs and policies, while others have found that there needs to be a mix of school climate and specific social-emotional learning involving direct teaching and a focus on effective teaching strategies (Abdollahi et al., 2017; Oberle et al., 2015; Yeager, 2017).

Abdollahi et al. (2020) found that building individual strengths can lead to the best outcomes while creating a positive environment. Programs that offer students choice and the

opportunity to provide input, as well as increased knowledge about making healthy choices, can be effective (Yeager, 2017). Schools can foster a positive school climate by integrating a code of conduct, values, and expectations for school community members, utilizing restorative practices for discipline related issues, creating anti-bullying policies, providing social-emotional learning opportunities for staff members, creating a positive behavioral recognition program, and instilling an overall focus on kindness (Oberle et al., 2015). Social-emotional learning programs can coincide with school climate (Durlak et al., 2015).

Staff can integrate directed schoolwide social-emotional learning programming, including anxiety management techniques such as mindfulness, meditation, and cognitive restructuring, which reduce stress levels (Durlak et al., 2015; Gouda et al., 2016). Mindfulness involves remaining in the present moment while focusing on one's breath or other grounding sources (Gouda et al., 2016). If one's mind strays, those practicing mindfulness are taught to recognize it and bring their mind back to the present. This practice can increase a person's regulation of cognitive, emotional, physiological, and behavioral aspects of their daily life (Gouda et al., 2016).

Researchers have found benefits of mindfulness and meditation specifically for students (Fredrickson et al., 2008). Students who practice mindfulness or meditation see increases in their academic performance, learning satisfaction, and self-regulation related to learning, such as intrinsic motivation and curiosity, as well as the regulation of emotions such as anxiety (Fredrickson et al., 2008; Gouda et al., 2016; Hambour et al., 2018). As overall stress decreases, students have more of a buffer for academic-related stress, and students' mindfulness levels are negatively correlated with psychosomatic symptoms, anxiety, depression, and cognitive inflexibility (Gouda et al., 2016; Tan & Martin, 2016). The beneficial effects of mindfulness

extend to building self-esteem, resilience, and academic self-efficacy (Gouda et al., 2016; Tan & Martin, 2016).

School Climate: Teacher Well-being

While there are many aspects of school climate, some research studies have shown positive effects of focusing on teacher and staff well-being so that staff can effectively integrate programs that facilitate the growth of solid student-staff relationships and a sense of belonging (Jennings et al., 2017). Teachers' mental well-being can impact the classroom and school climate. When teachers can regulate their negative emotions and express positive emotions, it creates a supportive, positive climate in the classroom (Jennings et al., 2017). Emotion regulation techniques, such as mindfulness, can increase teachers' well-being, their ability to create supportive relationships, and their ability to foster a positive school climate which leads to enhanced student engagement and learning (Roeser et al., 2012; Schure et al., 2008; Schussler et al., 2016).

The Cultivating Awareness and Resilience in Education (CARE) program attempts to impact teachers positively through experiential, didactic, interactive sessions, including emotion skills instruction, mindfulness, stress reduction strategies, and listening practices. This CARE program also improves staff's emotion regulation and coping skills with proven decreases in stress, burnout, and distress and increased energy and self-regulation, which led to increased positive teacher-student interactions and enhanced student learning (Jennings et al., 2017; Schussler et al., 2016). In addition, the program's effects led to improvements in classroom interactions, such as emotional support, which promoted learning and could be linked to a stronger ability to identify difficult emotions and utilize strategies to regulate, express, and cope

(Jennings et al., 2017). Other programs also show the benefits of teacher mindfulness, including increases in empathy, compassion, and the ability to regulate emotions (Schure et al., 2008).

School Climate: Relationships

In addition to programs that enhance teacher well-being, there are also programs designed to help students connect with adults in the school building fostering a more positive school climate, helping students develop coping strategies, and enhancing students' feelings that they are a part of the community (Weist et al., 2018). Students state that having a healthy relationship with a staff member at school is important to them (Liang et al., 2020).

Two related interventions that help students develop relationships are the Check-In/Check-Out and the Courage and Confidence Mentor program. Facilitators designed the programs for students with internalizing or externalizing issues with the intent to provide students with high-frequency contact with an adult in the building, positive reinforcement, and progress monitoring with a daily progress report used to track the program's effectiveness (Cook et al., 2015; Weist et al., 2018).

In addition to one-to-one programming, other small groups within the school provide opportunities for relationship building. For example, the Advisory program provides mentorship within a small group to help students develop a sense of community and connect with an adult in the building. Research showed that the program positively impacted students (Moeder-Chandler, 2018). A sense of community can also come from students' involvement in sports. One study showed that participation in a sport increased feelings of school climate, trust, respect, and healthy relationships with adults (Liang et al., 2020).

Strengthening Student Assistance Teams

Despite other interventions, schools can create identification, referral, and intervention programs for students with high-stress levels that support students' well-being (Weist et al., 2018). However, even with schoolwide changes and efforts to support students' well-being, school staff still need an effective way to identify students experiencing high levels of stress and refer those students to more intensive interventions (Faria et al., 2017; Weist et al., 2018).

Student Assistance Teams are composed of personnel who meet to discuss the academic, behavioral, and emotional needs of students identified using data (Newton et al., 2012; Weist et al., 2018). These teams have various names, such as teacher assistance team, prereferral intervention team, instructional consultation team, and response to intervention team. The team should include representatives from diverse areas, including administrators, teachers, school psychologists, social workers, counselors, social workers, family/guardians, students, and community mental health clinicians to be most effective (Weist et al., 2018).

Independent of the model utilized, student assistance teams that consider the students' larger environment when creating team structures and deciding on student supports have run effectively (Torres-Rodriguez et al., 2010). According to the ecological model created by Bronfenbrenner in 1979, various environmental factors can affect a person's development. Within the model, there are five systems, each having multiple levels that all have influence. The closest level to students is the microsystem, which includes family, peers, and aspects of the school in which students are enrolled. Because of the varying factors with levels of influence on a student, the best practice for student assistance teams is to have a multidisciplinary approach where multiple people with different perspectives can work together to create more effective outcomes (Algozzine et al., 2016).

Researchers have identified critical components of student assistance teams, including clear rules and procedures for meetings, using a set process, teacher support for implementation, administrator support, and diverse team members (Rosenfield et al., 2018; Torres-Rodriguez et al., 2010). The most critical component at the high school level is teacher support for and cooperation with interventions (Torres-Rodriguez et al., 2010).

A school employee with counseling knowledge and training in support structures leads most student assistance teams (Fan et al., 2016). In one study, school psychologists reflected that they felt most adequately prepared to lead student assistance teams, create referral systems, determine roles and responsibilities, and set the purpose and guidelines for the meetings.

In addition to the leader, effective teams include administrators, certified staff members, teachers, the referred student, and a family member (Algozzine et al., 2016). Study results demonstrate that middle and high school level teams are most effective when teacher members represent different disciplines. The different team members bring expertise from various areas, different knowledge of student development expectations and resources, and different perspectives, which can help identify the most effective action steps (Torres-Rodriguez et al., 2010). Overall, incorporating diverse members into the team builds capacity for the systematic identification of student issues and concerns and enhances appropriate recommendations of support.

Researchers found that student assistance teams are more effective when the data used to identify and monitor students comes from multiple sources, such as formal screeners, discipline referrals, and curriculum-based assessments (Weist et al., 2018). In addition, information from direct behavior rating scales, social skills improvement systems, and teacher nomination processes, are practical to use; however standard measures resulted in more students being

identified (Eklund et al., 2015; Miller et al., 2015). Once the data are collected and analyzed, the team can utilize the information to effectively identify prevention and intervention strategies, locate evidence-based assessments that can be utilized, and create action plans for students receiving more intensive support (Weist et al., 2018).

Some studies have shown that procedures that involve identifying students at risk, matching students with interventions, and monitoring students' progress, such as the Early Warning Intervention and Monitoring System, can be difficult for schools to implement; however, if implemented correctly, the systems can have a positive impact on student outcomes (Faria et al., 2017). Problem-solving practices typically have set steps; as one example, the steps included in the Early Warning Intervention and Monitoring System are depicted in Figure 4.

Figure 4

Early Warning Intervention and Monitoring System Steps



(Faria et al., 2017)

As shown in Figure 4, the Early Warning Intervention and Monitoring System involves specific steps related to setting up team constructs, utilizing data to make decisions, and monitoring the interventions that student assistance teams can implement to be effective in supporting students. As recommended by the American Institutes for Research, teams are most effective when they consist of five to seven people who use an evidence-based data measure for identifying students (Marken et al., 2020). Once data are collected, teams analyze and interpret the data, provide interventions to selected students, monitor students' progress, and review that progress frequently. These steps can lead to student growth; however, the process can be challenging for some teams to implement (Sugai & Horner, 2020).

Team Initiated Problem-Solving Protocols

While there are many ways to address high levels of student stress in schools, this study focused on the identification and support of students through the Student Assistance Team at Willow High School. The researcher chose this driver to target because of the potential high impact despite the limited resources and the research's time constraints.

One model for student identification and intervention through a Student Assistance Team is the Team-Initiated Problem-Solving process (TIPS). The model is one approach to leading multi-disciplinary school-based teams that meet regularly to review concerns regarding students' academic, social, and emotional behavior, and develop appropriate interventions. While other models have not always been effective, the Team-Initiated Problem-Solving protocol research is encouraging, especially when teams are provided with initial professional development on the model and follow-up assistance (Algozzine et al., 2016; Horner et al., 2018). Teams should be organized in a specific way to make the TIPS process effective, have access to necessary information, and have clear protocols that guide the use of data (Todd et al., 2019). Teams can

bolster efficiency by having one person review the data in advance and share it with the group to focus the members on the critical items during the discussion. According to Todd et al., the steps in the TIPS process are to:

- Accurately identify and define students' barriers to success while including information regarding the what, when, where, who, and why of the issue
- Create a goal that leads to the acceptable resolution of the issue
- Create an implementation plan
- Implement the plan while monitoring student's progress and fidelity of implementation over successive meetings
- Revise the plan as needed

The model developed by Algozzine et al. (2016) is displayed in Figure 5.

Figure 5

Team-Initiated Problem-Solving Model



(Algozzine et al., 2016)

Figure 5 displays the cycle involved in the Team-Initiated Problem-Solving process in which teams start at the center of the diagram, collecting and analyzing data, and then move to the step at the top of the circle, identifying the problem with precision (Algozzine et al., 2016). The team then moves in a clockwise direction through the rest of the actions, using data to inform decisions at every step. The process is cyclical, so if an intervention is not as effective as desired, the team starts the process again. The data used as part of the process of identifying students and monitoring interventions can be drawn from multiple sources.

In addition to the process, the TIPS model provides guidelines for structural components of the team, which many other models do not include (Algozzine et al., 2016). For instance, the TIPS model provides a team meeting template that details roles for team members and a standardized meeting minute form to allow meetings to run efficiently and effectively.

Newton et al. (2012) found that the TIPS model is most effective when training includes multiple components. First, team members should learn the problem-solving foundations, including constructing the agenda, creating team member roles, setting protocols for preparing for the meeting, running the meeting, and steps for follow-up after the meeting. Training should also include an introduction to the meeting minutes and a problem-solving action plan form.

Once the foundation is set, TIPS trainers must teach team members how to identify problems accurately (Newton et al., 2012), including how to define the student issue, stating a discrepancy between the current behavior and desired behavior. Then, before moving forward, the team reaches an agreement that the issue is significant enough to address.

The next step involves creating a hypothesis and identifying interventions (Algozzine et al., 2016). Before beginning to brainstorm action steps, the team discusses why the issue is happening, continuously asking logical “why” questions to dig deeper (Newton et al., 2012). The

hypothesis must include information that addresses the what, when, where, and who (Algozzine et al., 2016). Then, the team can identify solutions paired with the cause of the behavior. Possible solutions for changing students' behavior include preventing, defining, teaching, rewarding, reinforcing, withholding rewards or reinforcement, and using corrective consequences (Newton et al., 2012).

The teams that were not successful with using the TIPS model or matching students to effective interventions struggled with defining the student's problem accurately and matching the intervention correctly or thoughtfully (Todd et al., 2019). For example, one team in the study completed by Todd et al. (2019) utilized a packaged social skills program for students whose behavior did not match the concerns addressed through the program. Beyond not matching students to interventions effectively, in 15.9% of situations, interventions were planned to match the student concern carefully but were too complex or demanding of time or skill to be implemented correctly or effectively.

If team members are trained in the TIPS protocols, the staff can follow the steps and pair students with interventions effectively. In a study completed by Newton et al. (2012), the average rating of correct implementation at schools was 93%. However, the implementation fidelity can decline over time with new team members who have not been trained, new administrators who do not emphasize or support the program, or a team's lack of resources (Newton et al., 2012). Overall, the most successful teams had clear agendas, gave team members roles such as facilitator, note-taker, and timekeeper, started and ended on time, had team members attend and were held accountable, had a clear purpose for each meeting, and regularly created and reviewed plans based on data (Weist et al., 2018).

Effectively Identifying Students

There are multiple ways to identify and monitor students experiencing high stress levels and internalizing disorders. However, in a recent review of the National Center on Intensive Intervention, the academic assessments listed were far greater in number than the behavioral assessments. Behavioral assessments included the Social, Academic, and Emotional Behavior Risk Screener as the only screening tool listed and three progress monitoring tools, the BASC-3 Flex Monitor, Direct Behavior Rating, and systematic direct observation (Briesch et al., 2020).

In addition to standardized methods of identification, there are other methods that some schools use to identify students experiencing high levels of stress. Some studies support using students' self-reflection of their academic performance, while other study results do not support this practice (Feld & Schusterman, 2015; Suldo et al., 2019). Student self-reflection of their own stress levels, and their satisfaction with school and academic achievement and performance data, can be viewed as better indicators of high stress levels (Suldo et al., 2019). Lower student self-perception of academics, along with high motivation and high goals, can be an indicator of high-stress levels (Feld & Schusterman, 2015). In addition, school staff can analyze standardized tests, grades, and discipline issues (Jones & Suveg, 2015).

One commonly used method of identifying students experiencing high stress levels is teacher identification. However, one study showed that teachers only accurately identified 39% of students, and the rate of variability or sensitivity between teachers was significant, with some identifying 3% of students correctly and others identifying 60% correctly (Suldo et al., 2019). Researchers found that if teachers look for changes in students' behavior and emotions over time and track the duration of problems, the teachers will be most effective in identifying students experiencing high stress levels (Greif Green et al., 2017).

Staff members identifying students with high levels of stress can look for several warning signs. For example, in one study completed with students enrolled in advanced classes, students experiencing high-stress levels had difficulty coping effectively with the academic pressures, negative engagement with school leading to negative remarks about the rigor and demands of classes, tendencies to give up when faced with challenges, lack of academic effort, and worry about academic performance (Suldo et al., 2019). Other warning signs included academic issues such as low grades, negative affect, and attendance issues (Grief Green et al., 2017; Jones & Suveg, 2015; Suldo et al., 2019; Torres-Rodriguez et al., 2010).

The most effective identification process involved the collection of the student's perceptions and grades (Suldo et al., 2019). In addition, research shows that the identification and support of students experiencing internalizing disorders can improve a student's academic, social, and emotional outcomes (Weist et al., 2018).

Student Support in Practice

The environmental consultations demonstrated that school staff is attempting to address students' high stress levels in multiple ways. For example, staff members are actively working to decrease students' stress with whole-school approaches, identify individual students who may need higher levels of support, and enact interventions with those students.

In following recommendations from research studies, some schools address students' coping skills by targeting parent knowledge and interactions and providing students with opportunities to build social-emotional skills on a school-wide basis. For instance, Director of Guidance described how his district sends regular messages to families describing how parents can support students through times of challenge and ways to build students' resiliency. He also spoke about helping students build coping skills in school through school counselor-led

developmental guidance lessons that address various aspects of social-emotional learning. In addition, both High School Principal and Director of Guidance spoke about implementing dialectical behavior therapy (DBT) in health classes for the entire student body. Director of Guidance's school also offers a one-semester DBT class that students can elect to register for, or students can be recommended to enroll. The school administrators described DBT as a way for students to learn how to identify stressors and build coping mechanisms for use based on the situation. Director of Pupil Services described another method for implementing schoolwide social-emotional learning, including training teachers on integrating SEL into their curriculum and how to handle difficult conversations that arise in the classroom.

Another way schools address social-emotional learning and build students' coping abilities is to foster positive adult-student relationships. All school administrators spoke about integrating an Advisory program within their high school. The Advisory program allows small groups of students to meet with a teacher regularly. For example, students in one school are assigned to teachers and grouped for Advisory based on their school counselor, allowing counselors to work with their own students in Advisory groups and present lessons on such topics as navigating stress and healthy coping strategies.

Despite schoolwide strategies to address students' stress levels, the environmental informants described the need for higher levels of support for some students. All the informants stated that identifying students who need more support was a challenge, and one of their greatest concerns was not having enough resources to support struggling students. Director of Pupil Services described a standardized assessment that the school uses as a universal social-emotional screening tool. If students have elevated scores, they are referred to the school counselor; the school psychologist sees those with higher at-risk scores for further evaluations or the school

social worker for individual or group therapy. However, Director of Pupil Services said that sometimes students were not honest on the screening assessment making it difficult to identify students accurately. Director of Guidance also spoke of a universal screener; however, the school utilizes one that staff members created. Like Director of Pupil Services, Director of Guidance spoke of concerns about accurate identification but focused primarily on not having resources to assist students once the school had the students' results.

Another method that can be used to identify students of concern is through staff nomination. Director of Pupil Services described the process of identification and referrals at her school, including a form that counselors complete for any student they are aware of who might need more support. Director of Guidance's school also utilizes a similar process for any student not already identified through the universal risk assessment. Both schools utilize a staff-developed form that requires information about the concern and support already provided. The schools have a team that meets about referred students, but both interviewees described informal meetings that do not follow a set agenda. The teams consist of administrators, school counselors, school psychologists, social workers, and others such as a drug and alcohol counselor. The student support teams at both schools attempt to match students with higher levels of support, such as individual or group counseling. Director of Guidance also spoke about reviewing the students' progress after the intervention had been implemented.

Ultimately, all school administrators spoke about interventions and attempts to support students with research foundations. However, it appeared that each school had staff members who had adapted processes and procedures for their specific environment. Through further questioning, it was clear that some school administrators were not aware of the literature surrounding specific interventions implemented within their schools. Overall, the school

administrators spoke of wanting to find more effective ways to support students utilizing the school's current resources.

Conclusion

As demonstrated by research and professional knowledge, many students are experiencing high stress levels impacting students' academic performance and personal development (Knollmann et al., 2010; Sari et al., 2018; Wuthrich et al., 2021). Furthermore, the pressure or support students feel from school staff members and adults in the community can affect the students' stress levels (Kulakow et al., 2021). However, there are steps that school staff members can take to counterbalance the pressure that students feel, including those described in the driver diagram, such as improving the school climate and culture and addressing adult expectations (Abdollahi et al., 2017; Oberle et al., 2015; Yeager, 2017). To positively impact processes regarding students' stress at Willow High School, though, this Improvement Science Dissertation in Practice specifically targeted one aspect of the driver diagram: identifying students experiencing high levels of stress and the methods used to pair struggling students with appropriate interventions.

CHAPTER III: METHODOLOGY

While student stress has increased nationally, empathy interview data showed that student stress levels have also risen at Willow High School (American Psychological Association, 2014, 2020). Willow High School staff identified lowering students' stress levels as a goal. The researcher identified drivers to reduce student stress, including altering adult expectations of students' performance, improving the school's culture and climate, and changing the system of identifying and supporting students experiencing high stress levels.

This study used an action research methodology to examine whether providing training for the Student Assistance Team members impacted their identification of students experiencing high stress levels and their functioning as a team to support referred students. The measurements focused on the outcomes of one specific driver rather than the overall aim of reducing students' stress levels. Qualitative evidence drawn from interviews and observations, and quantitative evidence from rating scales documented the participants' views and the implementation of the new assistance team processes.

This chapter describes the purpose of the study and how it relates to the theory of improvement and the research design and study procedures. Data collection and data analysis methods are also discussed.

Theory of Improvement

A theory of improvement is developed by analyzing the context where the problem of practice is located, information from those involved in the problem and subsequent solution(s), and empirical research regarding the topic (Hinnant-Crawford, 2020). In the first phase of this

Improvement Science Dissertation in Practice, the researcher found that a problem of focus within Willow High School was increasing stress in students. During the problem identification phase, staff members indicated that the number of students experiencing high stress levels has risen over the past few years. A root cause analysis showed that staff and students believe that the increases in stress stem from high adult expectations without appropriate support, competition between students, effects of the COVID-19 pandemic, pressures of the college admissions process, lack of positive coping skills, and the current student support system.

The root cause analysis findings at Willow High School coincide with research performed in other settings. Academic pressure and social dynamics can cause student stress levels to rise (Horowitz & Graf, 2019). When students experience high levels of stress, they may experience negative impacts on their social, emotional, and academic development and achievement (MacCann et al., 2019; Nail et al., 2015).

While the researcher identified several potential levers of change that could positively impact student stress levels within Willow High School, this study focused on one driver and change idea within the working theory of improvement. In collecting information from the literature and those at Willow High School, the researcher determined that the high leverage driver that should be targeted in this study was identifying students experiencing high stress levels and the procedures to discuss interventions for those students. In selecting this driver, the researcher worked towards a more effective intervention system for students currently experiencing the highest need for support. By targeting this driver, the researcher anticipated observing changes within the driver outcomes; however, because of the study's limitations, impacts on the overall aim of reducing stress in students could not be measured.

Purpose of the Study

This study aimed to impact the Student Assistance Team's ability to identify and discuss support interventions for students with high stress as one component of a multi-tiered approach to reducing Willow High School students' overall stress levels. The researcher gathered information regarding the Student Assistance Team members' confidence in their ability to identify students experiencing high stress levels and the team members' ability to implement the Team-Initiated Problem-Solving protocols with fidelity when discussing interventions and supports for students. Furthermore, team members were asked to reflect on whether the protocols were helpful to the team's ability to identify students and match students to appropriate supports.

Research Design

This study employed an action research methodology with an improvement science approach. Within improvement science, researchers complete a Plan, Do, Study, Act (PDSA) cycle to create change or improvements (Perry et al., 2020). The PDSA process helps scholarly practitioners organize and lead improvement efforts in their environment. In the PDSA cycle, scholarly practitioners create a theory of improvement, enact change, analyze the results, and reflect on further steps that are needed. Each PDSA cycle happens rapidly, typically within 90 days. When implemented specifically within education, the PDSA cycle can also be referred to as a cycle of Strategize, Implement, Analyze, and Reflect (SIAR) (Perry et al., 2020). The PDSA or SIAR cycle aligns with action research with the shared focus on creating change that improves the environment or context.

This study involves steps included in PDSA and SIAR, with an action research methodology. The researcher engaged in empathy interviews and artifact reviews in phase one of the study to collect information about the status of the school and the root cause of the identified

problem of practice. The collected information was integrated into the systems map seen in Figure 1 and the fishbone diagram seen in Figure 2 in Chapter 1. Through further analysis of literature and knowledge from practice, the researcher created a driver diagram, seen in Figure 3 in Chapter 2, and identified possible strategies that could be utilized to effect change within the educational context. As the next step, the researcher implemented a change in the educational setting, collected data to analyze the effects of the change, and reflected on the results to inform future decisions about change that can lead to improvements in the school.

Action Research Methodology

Action research aligns with improvement science because of the membership of the researcher in the research environment and the focus on creating change to improve the setting (Creswell & Creswell, 2017; Creswell et al., 2007). Action research is characterized by the study's purpose, focus, change-based data and sense-making, researcher participation in the research process, and diffusion of knowledge to other practitioners (Martella et al., 2013). As with improvement science, action research is typically designed by the people affected by the outcomes, and the study must work to solve real-life problems (Ary et al., 2018). It is also cyclical in nature and often uses both quantitative and qualitative measures (Ary et al., 2018). Similar to other types of research, the data collection process in action research occurs systematically and follows the guidelines that have been set for other types of research (Martella et al., 2013).

Action research combines the identification of a need for change with specific action within a practice and frequent evaluation of the action steps (Martella et al., 2013). Action research differs from other forms of research in that, typically, the researcher is also a participant in the study and can bring their own perspective to facilitate the intended change (Merriam &

Tisdell, 2016; Herr & Anderson, 2015). In addition to serving as a participant, the researcher is usually involved in planning the research study and implementing strategies to improve the quality of life for those involved (Creswell & Creswell, 2017; Creswell et al., 2007).

By designing a study that considers the unique aspect of the setting, action research studies can contribute to both theory and practice and reduce the gap between the two (Ary et al., 2018; Creswell & Creswell, 2017; Creswell et al., 2007). Solutions from other studies may not apply to other settings because of the distinctive traits of the setting in which the action research is occurring (Ary et al., 2018). While action research can be used in any setting, it has often been utilized in schools (Ary et al., 2018; Martella et al., 2013).

This study utilized an action research methodology to implement a change idea developed from theory and practice that aimed to improve the practices and professional lives of those involved at Willow High School. The researcher applied a combination of previous research findings and practitioner experiences to design the study and aimed to find a sustainable and effective solution to the problem of practice through action research. The research was collaborative, as the study utilized the opinions of those involved in the local context to address the problem within the high school. In addition, the methodology assisted in answering the research questions, which focused on the practices of the Student Assistance Team members in the local context of Willow High School.

Mixed-Methods Design

The researcher used a mixed-methods convergent design to collect different types of information about the same topic, allowing for data triangulation. The researcher collected the qualitative and quantitative data separately, analyzed, and merged it for interpretation purposes. As Creswell and Plano Clark (2017) describe, the purpose of using the convergent mixed-

methods design is to be able to compare quantitative and qualitative data, validate data, further describe quantitative or qualitative data, or analyze relationships between variables. With the concurrent mixed-methods structure for this study, each strand of research was completed rigorously and further validated by the comprehensive results. The researcher collected and compared the information from the quantitative measure, the DORA-II, with the information gathered from the qualitative interviews to validate the results and discover more information about the topic.

Target Population and Participants

The identified problem of practice was the Willow High School students' high stress levels that impacted the students' academic, social, and emotional development. The overall aim of reducing students' high stress levels applied to many students within Willow High School. However, this study focused on one driver that involved the practices of staff members tasked with identifying and supporting students with high levels of stress. While all Willow High School staff members support students' emotional well-being, the Student Assistance Team members are ultimately responsible for identifying and intervening with students who need higher levels of support than can be enacted in the regular education classroom.

The Student Assistance Team includes 22 staff members: three assistant principals, one director of guidance, eight counselors, four school psychologists, one social worker, one school resource officer, three nurses, and one connections counselor specializing in drug and alcohol counseling. Student Assistance Team members are all certified staff hired by Willow High School. All the staff at Willow High School interact with students experiencing high stress levels in a high-achieving high school where the community focuses on acceptance to competitive colleges and universities; however, the participants of this study are limited to only the Student

Assistance Team members. All the participants are White, and the group includes six males and 16 females. Participants have varied years of experience ranging from one year to 35 years working at Willow High School in their current roles.

Each Student Assistance Team member was invited to participate in the study by email. Team members could opt into the study by completing the consent form in Appendix 1. All team members except one school psychologist and the three nurses elected to participate. The researcher, a school counselor at Willow High School, was not included in the participant numbers. No differentiation was made between those not participating in the study and those participating to protect confidentiality. The school psychologist not engaging in the study participated in the initial training and all Student Assistance Team meetings but was not included in the interviews or observation data collected. The school nurses did not attend the initial training; however, they also did not attend any Student Assistance Team meetings during the 2021–2022 school year because of increased work responsibilities of contract tracing and communicating regarding quarantines related to the COVID-19 pandemic. Table 1 provides the demographics of the Student Assistance Team and participants.

Table 1*Participants*

Student Assistance Team Member	Gender	Years of Experience in Role
Assistant Principal 1	Female	3–5 years
Assistant Principal 2	Male	3–5 years
Assistant Principal 3	Male	3–5 years
School Counselor 1	Female	15–20 years
School Counselor 2	Male	20–25 years
School Counselor 3	Female	30–35 years
School Counselor 4	Female	10–15 years
School Counselor 5	Female	1–3 years
School Counselor 6	Male	20–25 years
School Counselor 7	Female	20–25 years
School Counselor 8	Female	3–5 years
School Psychologist 1	Female	30–35 years
School Psychologist 2	Female	1–3 years
School Psychologist 3	Female	1–3 years
Related Service Provider 1	Male	1–3 years
Related Service Provider 2	Male	5–10 years
Related Service Provider 3	Female	5–10 years

Note: The Related Service Providers included one social worker, one school resource officer, and one connections counselor. They are listed as Related Service Providers to protect their identity.

Note: The Director of Guidance is included as a School Counselor to protect their identity.

Procedures

The procedures of this Improvement Science Dissertation in Practice followed the Plan, Do, Study, Act (PDSA) cycle. In the study's first phase, the researcher identified a problem of practice, the causes and interrelated systems, related literature and practice, and a lever of change. The second phase included training and ongoing support for the members of the Student Assistance Team as they worked to identify students experiencing high stress levels and engaged in discussions about how to assist those students.

The researcher designed the intervention and analysis phase to fit within 90 days, starting in December of the 2021–2022 school year. Phase 2 began with an introduction to this stage for the participants and obtaining signed consent before moving to the professional development stage. The researcher provided professional development before the program began, along with continued support during implementation, which has been proven to be the most effective approach to program implementation with fidelity (Durlak et al., 2015). Based on this information, the researcher scheduled two hours of in-person professional development for the Student Assistance Team participants at the beginning of December 2021 and continued to support the team as they implemented the Team-Initiated Problem-Solving (TIPS) protocols. In addition, the initial training session included information on identifying students with high stress levels and an introduction to the TIPS protocols.

The first part of the professional development session focused on identifying students experiencing high levels of stress. Fostering an understanding of the need for the training and the benefits of the program changes can lead to more positive results (Durlak et al., 2015). Therefore, the session began with discussing the negative effects of high stress levels to create shared knowledge of why the team needs to identify and intervene with students. After the initial

part of the session that addressed staff perceptions, participants actively engaged in the learning by creating a list of what they believed the identifiers of high-stress levels were before comparing their thoughts to the information found in the literature. Signs of elevated stress levels provided to participants included decreased student engagement, extreme worry, especially regarding academic performance, expressions of self-doubt, absences from class, poor concentration, constant fatigue, difficulty initiating tasks, mood swings, lack of sleep, and somatic symptoms such as headaches (Feld & Schusterman, 2015; Jones et al., 2015; Suldo et al., 2019). Finally, to apply the knowledge to practice, the researcher prompted participants to consider students they worked with who exhibited signs and symptoms of high stress.

In the second part of the professional development session, the researcher introduced participants to the Team-Initiated Problem-Solving process. The TIPS process allowed school staff groups, such as Willow High School, to effectively identify and discuss students who need higher levels of support than what is provided in the regular classroom (Algozzine et al., 2016; Todd et al., 2019). Within the professional development, the participants discussed the process steps so that participants understood how to move through each stage of structuring the team, identifying the student issue accurately, creating a hypothesis, brainstorming and choosing solutions or interventions, creating an action plan, and evaluating the student's progress (Newton et al., 2012). In addition to the process steps, the team discussed the initial preparation for the meetings, including creating an agenda, assigning roles, collecting data, and organizing the paperwork such as the meeting minutes and problem-solving action plan forms. To build mastery of the skills, the researcher provided handouts with a diagram of the cycle and student scenarios before asking participants to move through the TIPS protocols using an example of a student experiencing high levels of stress. The facilitator provided feedback after the role-play activity.

The researcher asked the team to implement the student identification practices and TIPS protocols during Student Assistance Team meetings from December 2021 to February 2022. Based on the literature that shows that continued support and training can improve the sustainability of a program and the fidelity of implementation, the beginning, and end of each meeting included time for reflection and re-training on the TIPS protocols (Durlak et al., 2015; Meyers et al., 2019). At the end of each meeting session, the researcher asked team members to reflect on the procedures verbally and whether they followed the model precisely. Participants also provided feedback regarding their impressions of which aspects of the model they implemented well, what did not go well, and if there were aspects of the protocols that were more effective than others in helping to support students. The researcher designed future support session topics based on the information gathered during the group interviews and observations.

The researcher observed each meeting and used a standardized form, the Decision, Observation, Recording, and Analysis-II (DORA-II) form, to track the implementation of the model. Based on group members' reflections and feedback, as well as the observation data, the researcher created plans for specific areas to focus on during the beginning of the following meeting, leading to adaptive instructional sessions over time. Newton et al. (2011) demonstrated that the type of coaching used for this study led to more consistent implementation of data-based decision-making processes. When coaching is provided so that programs are implemented with fidelity, outcomes improve (Meyers et al., 2019). The observations of the implementation of TIPS and the support provided through coaching continued for six Student Assistance Team meetings. Support session topics included the structure of the meeting, steps included in the TIPS process, the creation of a hypothesis, and the inclusion of a coordinator and timeline in the implementation plan. After the first two sessions, the researcher provided an outline for meetings

with questions the team could consider as they moved through the process. The outline is in Appendix 4.

The researcher performed measures to assess the outcomes of the changes and analyze the data between February and March. Next, she conducted individual and small group semi-structured interviews that allowed participants to reflect on the Student Assistance Team process changes and any unintended consequences. Finally, the data from the interviews were combined with observation data to inform future decisions about Student Assistance Team processes.

Data Collection Instruments/Measures

Once the Student Assistance Team members agreed to participate, the researcher collected qualitative and quantitative data to explore the process during the change and the participants' views of the outcomes, using multiple measures as part of the data collection and analysis process to strengthen the validity of the results. The data collection methods selected for this study included observations of the Student Assistance Team meetings using the Decision, Observation, Recording, and Analysis-II (DORA-II) form created by Algozzine et al. (2019), small group interviews, and individual interviews.

Observations

The researcher observed the Student Assistance Team meetings to determine to what extent the participants implemented the TIPS protocol with fidelity and informed decisions about any needed re-training and support. Observations are often used in research to provide a picture of what is occurring in an environment and allow the researcher to obtain firsthand experience (Martella et al., 2013). The researcher can also obtain information that may be missed through other measures such as interviews.

The researcher recorded and analyzed the observations using the DORA-II form (Appendix 2). Researchers designed the DORA-II for direct observations of Multi-Tiered System of Support meetings, such as those of the Student Assistance Team at Willow High School (Morrison et al., 2020). The observation form asks the observer to track key elements of problem-solving meetings, such as the use of a meeting agenda, timing of the meeting, use of meeting roles, and if the team engages in the designated steps, such as identifying the problem, examining data, and creating an intervention with an action plan. The first part of the DORA-II focuses on meeting foundations, while the second focuses on the six steps of effective problem-solving. Sub-scores consist of percentages that represent how many components of a category the team includes in their discussion regarding a student, based on the TIPS process.

The DORA-II is a valid and reliable measure for Multi-Tiered Systems of Support (Algozzine et al., 2016; Morrison et al., 2020). Validity is the extent to which a measure accurately reflects the intended measure (Creswell & Plano Clark, 2018). Researchers designed the DORA-II to ascertain if participants followed the six steps of the TIPS protocol to match students with supports effectively. The features measured on the DORA-II coincide with the features of effective problem-solving meetings at a rate of 87%–100% (Algozzine et al., 2016; Morrison et al., 2020). In addition, researchers have found inter-rater reliability to be approximately 90% (Morrison et al., 2020). The measurement's accuracy and the directed use of the TIPS protocol allowed the researcher to use the DORA-II to answer the study's research questions.

Group Interviews

In addition to weekly observations of Student Assistance Team meetings, the researcher engaged the participants in reflective conversations about implementing the TIPS protocols at the

end of each meeting. The group interviews served as leading measures of improvement regarding the changes made to the Student Assistance Team's functioning. Leading measures can provide helpful information about the success or lack of success of a change during the intervention while lagging measures focus on the impact after the completion of the intervention (Bryk et al., 2015). Utilizing leading measures was vital for the success of the intervention with the dynamic approach to the support provided to the Student Assistance Team in this Dissertation in Practice. The leading measures allowed for analysis throughout the intervention and related adjustments as needed.

The researcher collected information directly from the participants through semi-structured group interviews and used it to make informed decisions about the training needed in future Student Assistance Team meetings. Because of the limited amount of time in each meeting, the questions posed included: "What components of the TIPS protocol did the team implement well or not well, and why? How is the TIPS protocol helping or hindering the support of students experiencing high stress levels?" The participants' answers to the complete list of questions, seen in Appendix 3, allowed for comparison between the participants' views and the observation data from the DORA-II. The researcher designed the ongoing training and support provided at the beginning of each session based on data from the DORA-II and the group interviews.

Individual Interviews

The researcher engaged participants in semi-structured individual interviews at the beginning of the study and after observing the implementation of the TIPS protocol period. The interviews allowed the researcher to collect data directly from the participants and obtain information about internal feelings that may not have been observable (Martella et al., 2013).

Furthermore, the interview procedures served as a check for the observations and allowed the participants to express their thoughts in an individual setting instead of the group interviews conducted at the end of each SAT meeting.

Individual interviews were conducted in the Counseling Office, frequently used for staff meetings, and designed to protect participants' confidentiality. Participating staff members engaged in two interviews, each lasting approximately 45 minutes. The researcher asked questions about the strengths and weaknesses of the referral and intervention discussion process, the implementation fidelity and effectiveness of the TIPS model, and the professional learning in which the group participated. Many of the individual interview questions are grounded in research completed by Torres-Rodriguez et al. (2010), and all the pre-set questions are included in Appendix 3. In addition, the interviews were semi-structured to allow the researcher to ask follow-up questions based on the participants' responses to the initial questions.

Confidentiality Measures

This study was approved by the researcher's university Institutional Review Board. Study participants' identities were kept confidential; identifying information was not collected, and participants' names were not included in this written report. The researcher asked the Student Assistance Team members not to use students' real names during the observed sessions to protect students' identities.

In addition to protecting the participants' identities, safeguards were also in place to support school staff members who experienced stress related to supporting students exhibiting high stress levels and maladaptive behaviors because of stress. Additionally, information regarding the Employee Assistance Program was available to any participants who needed support.

Research Questions

The study measures aimed to determine the effects of the intervention with the Student Assistance Team members as they identified and supported Willow High School students experiencing high levels of stress. The study's first phase identified a complex issue within Willow High School and its related root causes. The second phase aimed to measure the effects of the intervention for one specific driver, the systems used to identify students and provide appropriate support. The four research questions for the second phase were:

1. To what extent does whole group professional development, with ongoing monitoring and support, increase Student Assistance Team members' perception of their ability to identify students experiencing high levels of stress? Why?
2. With whole group professional development and ongoing monitoring and support, to what degree does the Student Assistance Team implement the Team-Initiated Problem-Solving structures and processes with fidelity when identifying and discussing interventions for students with high stress levels? Why?
3. In what ways does the implementation of the Team-Initiated Problem-Solving process affect staff members' perception of the effectiveness of the Student Assistance Team?
 - 3a. What components of the Team-Initiated Problem-Solving process were most effective and why?
 - 3b. To what extent does implementing the Team-Initiated Problem-Solving process lead to more effective outcomes for the case presented, and why?
4. What elements of professional learning were most effective and why?

Data Analysis Methods

This study focused on measuring the impact of making changes at Willow High School in relation to one driver, the systems used to identify and intervene with students needing higher levels of support because of their feelings of stress. As depicted in Table 2, using observations and interviews, the researcher answered the research questions by examining changes in participants' confidence levels in their knowledge and ability to identify students, the SAT members' ability to implement the TIPS model with fidelity, and staff members' views of the TIPS protocols as it relates to the effectiveness of the Student Assistance Team.

The researcher observed the Student Assistance Team meetings throughout the study and collected notes on the DORA-II form. The notes, along with a produced fidelity score, helped direct support provided to the Student Assistance Team. Using the system designed by Newton et al. (2012), the fidelity score consists of multiple facets and comprises percentages in each subcategory. For example, the Foundation Score represents the percentage of the foundational tasks and steps the team completed. The Problem Precision Score measures how accurately the team described the problem, including information related to the “what, when, where, and who.” The Thoroughness Scale represents the team’s ability and adherence to the protocols of creating a hypothesis about why the issue is occurring, reviewing collected data, identifying a solution, and creating an action plan for implementing the solution. Finally, the Solution Score is the percentage of issues that the team decided to address with a specific intervention. The researcher calculated subcategory scores for each meeting held during this study and analyzed trends in the data.

Table 2*Connecting Data Collection and Analysis with Research Questions*

Research Question	Data Collection Tool	Data Analysis
1. To what extent does whole group professional development with ongoing monitoring and support increase Student Assistance Team members' perception of their ability to identify students experiencing high levels of stress? Why?	Individual semi-structured interviews	Interviews: Coding for themes
2. With whole group professional development and ongoing monitoring and support, to what degree does the Student Assistance Team implement the Team-Initiated Problem-Solving structures and processes with fidelity when identifying and discussing interventions for students with high stress levels? Why?	Observations on DORA-II form Small group semi-structured interviews Individual semi-structured interviews	DORA-II: Calculate fidelity: foundation, problem precision, thoroughness, and solution scores and analyze trends over time Interviews: Coding for themes
3. In what ways does the implementation of the Team-Initiated Problem-Solving process affect staff members' perception of the effectiveness of the Student Assistance Team?	Small group semi-structured interviews Individual semi-structured interviews	Interviews: Coding for themes
3a. What components of TIPS were most effective and why?		
3b. To what extent does the implementation of the TIPS process lead to outcomes that were more effective for the case presented, and why?		
4. What elements of the professional learning and support were most effective and why?	Individual semi-structured interviews	Interviews: Coding for themes

In addition to observations, the researcher conducted group interviews at the end of each Student Assistance Team meeting and individual interviews at the beginning and end of the study's intervention period. The group interview questions focused on team members' views of the implementation of the TIPS protocol in each session. The questions surrounded the fidelity of the implementation and components that helped or hindered progress toward the goal of identifying and supporting struggling students. The researcher coded the responses by hand, analyzed the results for trends, and compared the qualitative themes to the quantitative information from the completed observations to inform the training sessions conducted at the beginning of subsequent Student Assistance Team meetings.

Separately, the researcher conducted individual interviews at the beginning and end of the intervention period to obtain information about the implementation of the TIPS protocols but focused on the entire period rather than individual sessions. Once completed, the researcher analyzed the information following the procedures recommended by Clark and Creswell (2014), including preparing the data, exploring the data, using a coding process, refining codes to build results, and using strategies to validate the results. She completed the coding by hand to group units together into common threads and then looked for temporal, causal, or nested relationships during the analysis phase. As a triangulation strategy in this mixed-methods study, the quantitative results from the observations were compared to the qualitative information gathered from the group and individual interviews before drawing conclusions about the effectiveness of the staff training and TIPS procedures.

Overall, the collected and analyzed data provided information that could be used to decide how to proceed with the overall aim of reducing students' stress levels at Willow High School.

Threats to Validity

When designing and executing studies, researchers consider threats to internal and external validity and issues of trustworthiness of the results (Martella et al., 2013). Internal validity relates to the potential that the results either occurred because of the chosen intervention or another factor, whereas external validity relates to the generalizability of the results to other populations or conditions. Those utilizing action research may not be as concerned with controlling threats to internal and external validity as researchers using other approaches. For example, since this study utilized action research, maturation and changes related to biological or psychological processes were not a concern (Martella et al., 2013). In addition, since there was only one participant group in this study, other threats to internal validity, such as resentful demoralization of the control group or compensatory rivalry by the control group, did not apply.

Although many threats to validity may not have applied to this study, some potential validity issues were present. Some factors that might affect the results could include observer bias, reactivity in participants to being observed, and a lack of recall of events during interview sessions (Martella et al., 2013). The researcher utilized strategies to mitigate the threats to validity.

Observer Bias

The researcher used observations to collect data during this study. While observations can allow researchers to obtain a firsthand view of the results of an intervention, researchers may record and analyze the results based on their own biases, viewpoints, and background (Creswell & Plano Clark, 2017; Martella et al., 2013). For example, when using the Decision, Observation, Recording, and Analysis II form, a researcher could mark certain categories, such as the hypothesis, as developed or not developed based on the researcher's interpretation of the

conversation. This study incorporated a secondary observer for two of the six Student Assistance Team discussions to mitigate the potential discrepancies or observer bias. The researcher and the secondary observer both completed the DORA-II form, and the scores were compared and found to be consistent. Interobserver agreement checks can also strengthen the reliability of the results.

Hawthorne Effect

The Hawthorne Effect could be another potential threat to the validity of the study results. The Hawthorne Effect involves the participants' reactivity to their involvement in a study. Participants' awareness that they are involved in a study and being observed can change the participants' behavior. In this Dissertation in Practice, participants may have been more likely to follow the steps involved in the TIPS process when they were being observed. To mitigate this potential threat to validity, the researcher asked participants about their views on the feasibility of implementing the TIPS process and the likelihood of continuing to implement the steps in the future.

Time of Measurement

The timing of the measurements that the researcher used could also affect the validity of the results. Participants engaged in individual interviews before the initial training began and after the sixth observation of the Student Assistance Team in which the TIPS process was implemented. By the time the researcher conducted the final individual interviews, the participants may not have remembered the specifics of the implementation of TIPS within each meeting. To mitigate this potential threat to validity, the researcher conducted group interviews at the end of each session so participants could reflect on each discussion and utilized data drawn from different sources and participants as a triangulation strategy. The researcher used

information from direct observations of meetings, group interviews, individual interviews, and surveys to draw conclusions.

Conclusion

This Improvement Science Dissertation in Practice focused on answering four main research questions related to one driver and change idea. The topics studied included how professional development with ongoing monitoring and support affected Student Assistance Team members' perception of their ability to identify students experiencing high levels of stress and the implementation of the Team-Initiated Problem-Solving structures in SAT meetings. Data were collected through observations, group and individual interviews, and survey forms and analyzed to answer the research questions and inform decisions at Willow High School.

CHAPTER IV: PRESENTATION OF FINDINGS

High student stress levels can lead to academic, social, and emotional development issues and negatively affect students' physical well-being (Horowitz & Graf, 2019; Krafchek & Kronborg, 2018; Nandagaon & Raddi, 2020; Ogilvie et al., 2018). At the beginning of this Improvement Science Dissertation in Practice, the researcher engaged in empathy interviews to better understand the problem of student stress, which is a major concern within Willow High School. After conducting a root cause analysis and identifying changes that could positively impact the defined problem, the researcher selected one driver of change, Student Assistance Team practices, to address as part of this study. The purpose of the study was to examine the effects of training on the Student Assistance Team's ability to identify students experiencing high levels of stress and implement a system to effectively support those students.

This study involved an initial training for the members of the Student Assistance Team and ongoing support sessions as the team identified students and implemented the Team-Initiated Problem-Solving process during meetings. In addition, the researcher collected data on the effectiveness and impact of the training and implementation of TIPS through individual and group interviews and observations of meetings. This chapter includes information about the collected data and the results of the analyses.

Description of the Sample

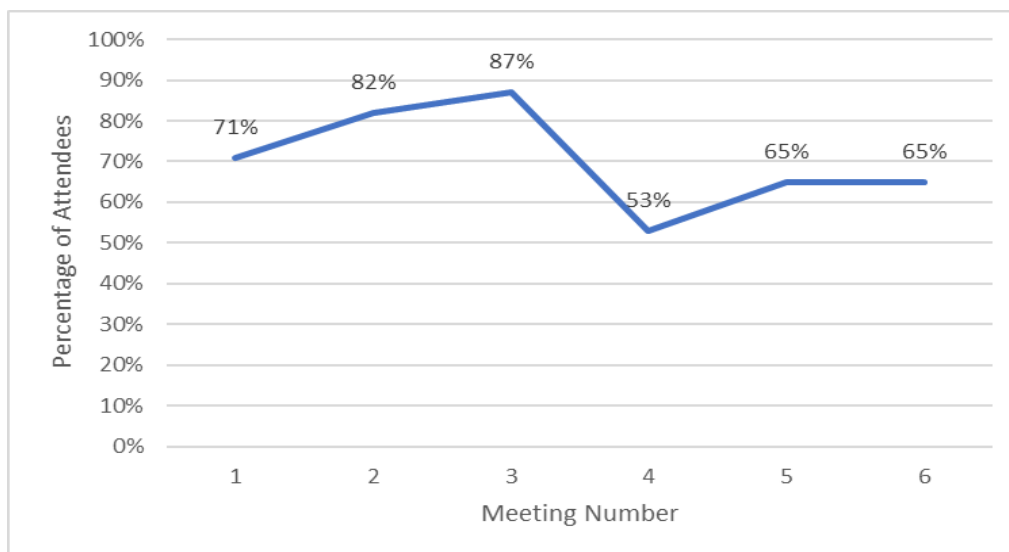
All 22 members of the Student Assistance Team were invited to participate in this study. The team included three assistant principals, one director of guidance, eight counselors, four school psychologists, one social worker, one school resource officer, three nurses, and one

connections counselor specializing in drug and alcohol counseling. Except for one school psychologist and three nurses, the Student Assistance Team members participated in the study. The researcher, a school counselor, is not included in the final number of 17 participants.

The researcher gathered observational data from six Student Assistance Team meetings. Attendance at each of the meetings ranged from 53% to 87%. Figure 6 presents the percentage of participants in attendance at each Student Assistance Team meeting.

Figure 6

Percentage of Participants in Attendance at Student Assistance Team Meetings



All participants reported intention to attend the initial training and every meeting; however, as was common to the temporal context of the intervention, unplanned conflicts arose at times because of other essential meetings. For example, four participants could not attend the group training session, but they participated in individual training sessions before attending the subsequent Student Assistance Team meetings. The conflicts with SAT meetings were most often with special education Planning and Placement Team meetings that lasted longer than the originally scheduled time. Each Planning and Placement Team meeting included an assistant principal, school counselor, and school psychologist; therefore, at least three study participants

could not attend the Student Assistance Team meeting when meeting times conflicted. Other times, school safety and discipline issues arose, requiring the attention of the assistant principals and school resource officer during the Student Assistance Team meeting times. Another frequent reason for members' absence from meetings was an illness, particularly when members had COVID-19. Absences because of COVID-19 were particularly prevalent during meetings four, five, and six. These meetings occurred during heightened COVID-19 transmissions because of the spread of the Omicron variant. While some team members were not present for all meetings, those in attendance were representative of the entire Student Assistance Team, and team members who worked directly with the identified student for consultation always attended.

Results

The study results include both quantitative and qualitative data. The researcher gathered the data through individual and group interviews and observations of Student Assistance Team meetings. Because of the confidential nature of team meetings and discussions of specific students, meetings and interviews were not audio-recorded; instead, they were transcribed through written notes taken by this researcher so they could be studied in detail, linked with analytic notes, and produce themes in response to the research questions.

In response to research question 2, the researcher utilized the DORA-II form to record the observations and calculate numerical scores for various aspects of the implementation of the TIPS process. Inter-rater reliability was conducted with a TIPS and DORA-II trained school employee observing two Student Assistance Team meetings and recording scores to improve the reliability of the findings. The two raters' scores were consistent in 88% of the categories. In comparing the findings of the two raters, differences appeared in the Problem Precision category and Solution Implementation Plan category. In cases of differences, the lower score was utilized.

Overall, most scores were consistent between the two raters and provided an increased level of confidence in the quantitative results.

This results section includes the data for each research question, and each research question is presented with the associated qualitative or quantitative data. The information presented for Research Question 2 includes integrating both qualitative and quantitative data.

Research Question One

To what extent does whole group professional development, with ongoing monitoring and support, increase Student Assistance Team members' perception of their ability to identify students experiencing high levels of stress? Why?

The researcher collected data for the first research question through individual interviews and identified themes after coding and analyzing the participants' responses. Participants described learning about and reviewing the identification of students experiencing high stress levels in the initial training provided in December 2021. Thematic analysis of professional development codes revealed a shared experience of increased learning. Participants described varying levels of new knowledge development.

Student Identification Proficiency

Many participants described how they already considered themselves proficient in identifying students experiencing high stress levels prior to the training intervention. Most participants described feeling confident in their abilities to identify students. They believed their skill came from experience gained working in a high-achieving school or professional training they received as they prepared for certification in areas such as psychology or counseling. For example, School Psychologist 1 explained,

In my role as a school psychologist, I am trained to identify students experiencing high levels of stress. However, this training introduced new thoughts on how

specific behaviors could be stress-related or could have additional causes such as physical well-being.

While many participants felt confident in their ability to identify students, most participants also made statements about new learning that occurred during the training.

Increased Learning

Approximately half of the participants stated that despite having prior knowledge of student stress indicators, the training provided an opportunity to learn about new symptoms to identify students. In addition, most participants were able to list specific warning signs that they would now look for in students after engaging in the training.

I think this did help with identifying other symptoms of stress I was not focused on in the past. (Related Service Provider 1)

It is great to remember how different this can look in different students, especially emotionally. The root of what may appear to be anger, for example, may truly be stress. (School Counselor 1)

After the training, most participants were able to identify a variety of new warning signs that indicated that the school employees could assess if a student may have high-stress levels or other emotional concerns. These signs included academic indicators, physical symptoms, substance use, weight loss or gain, eating habits, risky or erratic behaviors, attendance, and health office visits.

While most participants felt confident in their student identification abilities before the training, some believed the training contributed substantially to their skills. A small portion of participants was unsure of their skills before the training and felt more confident and comfortable afterward. School Counselor 8 reflected that the collaboration and discussion with colleagues during the training increased their ability to identify students experiencing high levels of stress the most and led to the counselor's confidence in applying the knowledge in the future.

Conclusion

Most participants felt confident in their ability to identify students before the training because of previous education or experience; however, others who were less confident in their ability initially gained student identification skills through the training. After the training, most participants were able to state warning signs and symptoms they learned about that they had not previously connected with potential high stress levels. Overall, participants felt that they would be able to apply this new knowledge to practice.

Research Question Two

With whole group professional development and ongoing monitoring and support, to what degree does the Student Assistance Team implement the Team-Initiated Problem-Solving structures and processes with fidelity when identifying and discussing interventions for students with high-stress levels? Why?

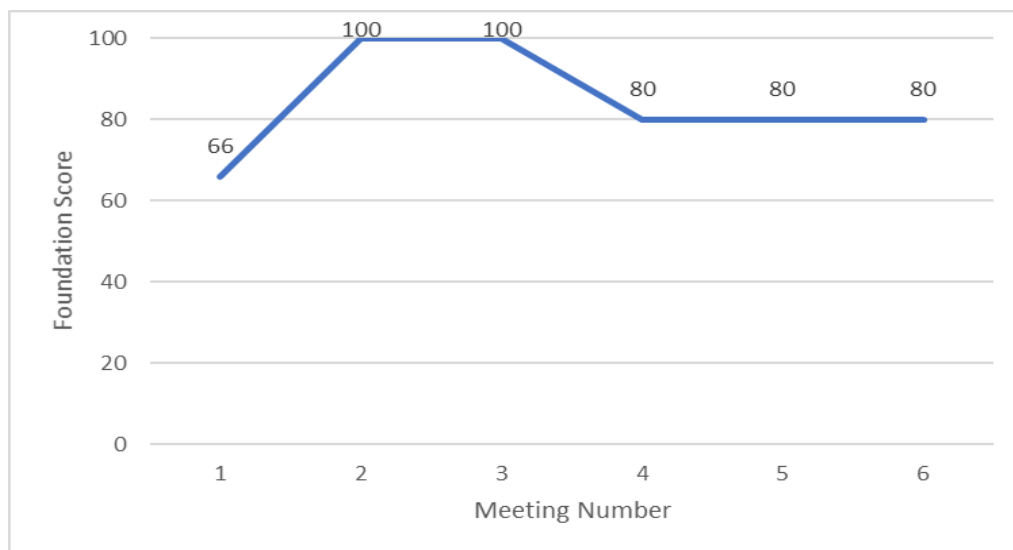
The researcher collected qualitative and quantitative data to measure the implementation of the Team-Initiated Problem-Solving structures and the participants' views of the implementation process. The researcher conducted group interviews at the end of each of the six Student Assistance Team meetings, where the participants utilized the TIPS process and conducted individual interviews at the end of the study. The qualitative information from the interviews coincides with the quantitative data collected through observations of the Student Assistance Team meetings.

The quantitative and qualitative data reflect improvement over the intervention period of the six Student Assistance Team meetings. Utilizing the DORA-II observation form, the researcher calculated Foundation, Problem Precision, Solution, and Thoroughness scores. The DORA-II form does not provide an overall implementation score.

Foundation Score. The Foundation score includes the components that school-based teams can arrange to foster the success of each meeting. For example, according to the DORA-II, points are awarded for starting and ending the meeting on time, having at least 75% of participants in attendance, having the previous meeting minutes and an agenda available, assigning participants to roles such as the data collector and facilitator, and selecting the next meeting date and time. Figure 7 displays the Foundations Scores throughout the six Student Assistance Team meetings.

Figure 7

Foundations Score



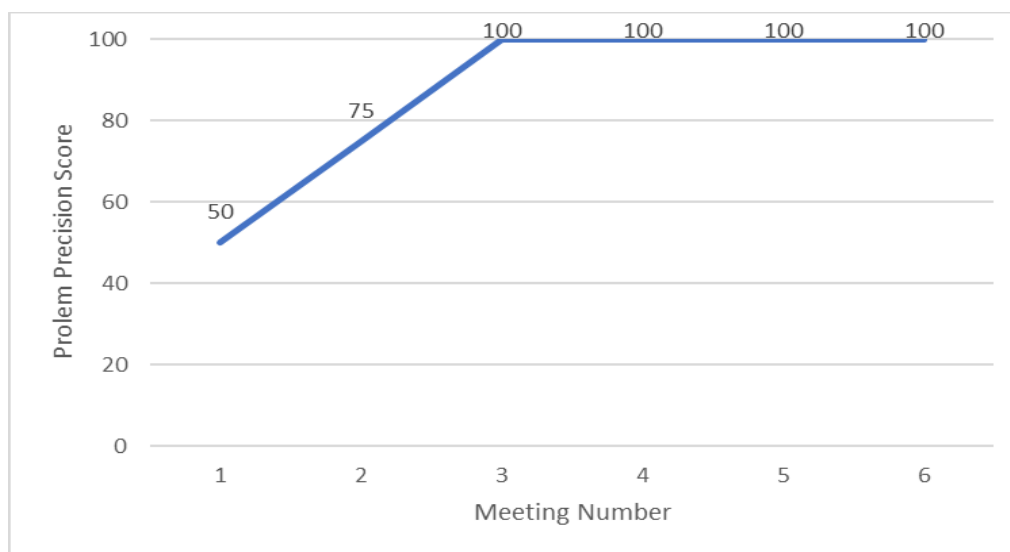
According to observational data, the Willow High School Student Assistance Team fulfilled many of these components, such as having an agenda available and having meetings scheduled in advance prior to the initial training. However, the team had not consistently started their meetings on time before the initial training, which continued into the first observed meeting and led to a decreased Foundation Score for the first session. In addition, the team did not earn points for meeting the benchmark of having 75% of participants in attendance during the first

and the last three meetings. If the team had a higher level of attendance, the Foundation Score would have been 100% for the last three meetings.

Precision Score. After the initial section regarding the fundamental building blocks of Student Assistance Team meetings, the DORA-II includes a section that measures the team's precision in defining the observed student issue. To earn full points in this section, teams must identify who is involved in the issue, where and when it occurs, what happens when the concern arises, and hypothesize why it might be happening. Figure 8 presents the Problem Precision scores for each Student Assistance Team meeting.

Figure 8

Problem Precision Score



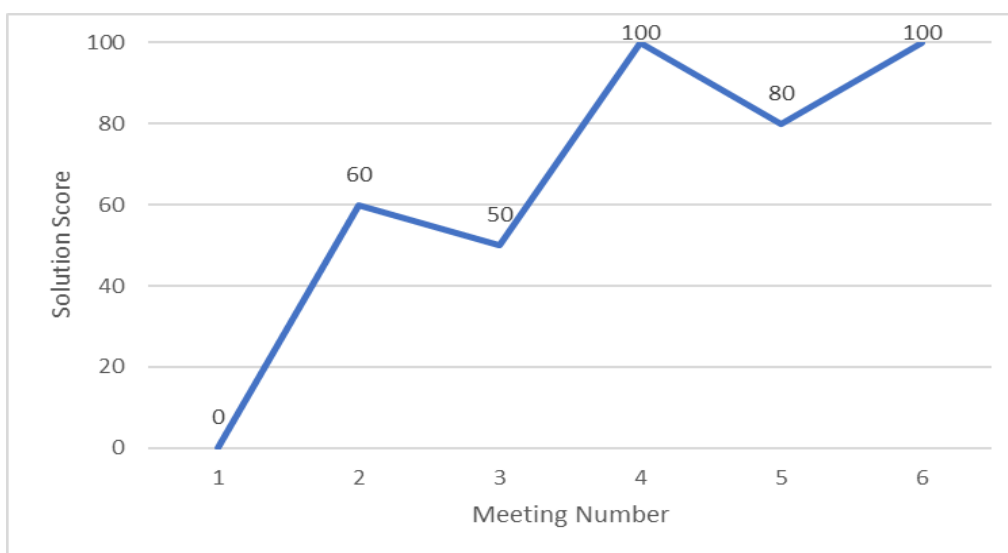
In every meeting, the Student Assistance Team was able to identify the referred student who appeared to be experiencing high levels of stress. The referring school counselor presented information about where the student exhibited stress symptoms and when the student experienced feelings of stress. However, the team did not identify a hypothesis in the first two meetings. Participants described their improved ability to include a hypothesis in qualitative interviews, confirming the quantitative results. However, some team members stated that they

felt the hypothesis was not always explored in enough depth or explicitly defined as well as it could have been.

Solution Score. As part of the TIPS process, members move into the solution identification and implementation planning phase once the school-based team has defined the problem. The Solution Score is the percentage of problems for which the team creates solutions and implementation plans. Figure 9 displays the Solution Scores for each observed Student Assistance Team meeting.

Figure 9

Solution Score



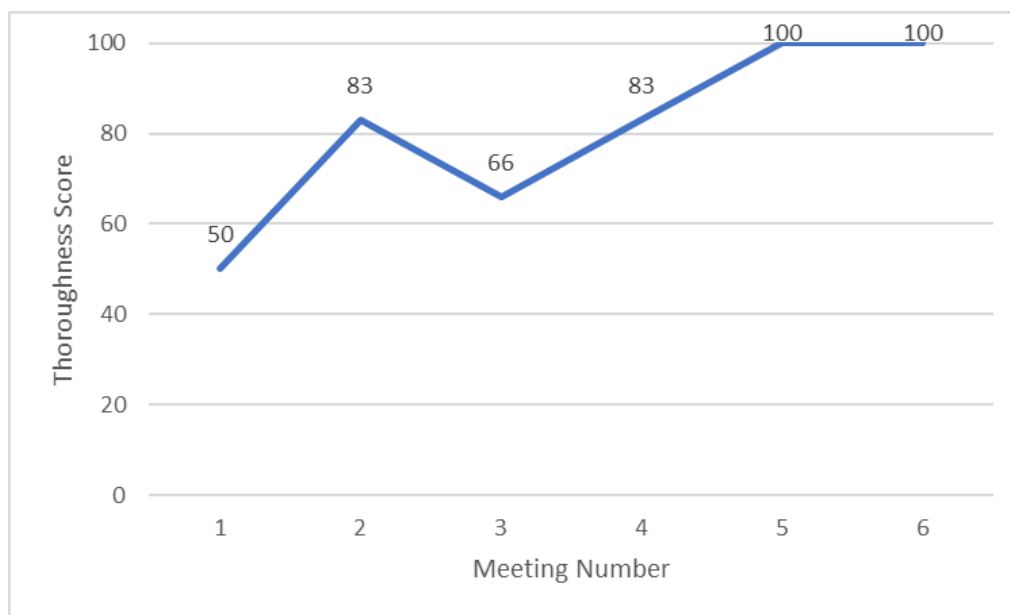
Because the Student Assistance Team did not fully identify a problem during the first observed meeting, the team could not create a solution and implementation plan. In the subsequent meetings, the team improved its ability to identify a problem and hypothesis regarding the reason for the student's stress which led to an increased ability to develop solutions. During interviews, participants also expressed their perception of increased abilities to identify a problem and accurately match students with effective solutions. However, after an

initial increase in Solution Scores on the DORA-II, the team did not create a solution for all student issues discussed during meeting number five, leading to a slight dip in the solution score.

Thoroughness Score. The final DORA-II score, the Thoroughness Score, includes a component for solution development because of the importance of the step in the TIPS process (Algozzine et al., 2016). In addition, the Thoroughness Score consists of the completion of the other TIPS steps. The components included in the score are the development of a hypothesis regarding why the problem is happening, review of data, creation of a possible solution, and the creation of an implementation plan that includes the responsible employee and a timeline. Figure 10 presents the Student Assistance Team's thoroughness scores according to the DORA-II scoring system.

Figure 10

Thoroughness Score



The Student Assistance Team could engage in the scored steps more explicitly over time with continued support and guidance. During the first few meetings, the team missed some steps,

such as creating a hypothesis and developing an implementation plan that included all necessary components. However, by the end of the six observed meetings, the Student Assistance Team members were able to complete the steps of the TIPS process.

By the end of the intervention period, most participants believed that the Student Assistance Team fully implemented all aspects of the TIPS process well. Throughout the intervention period, participants identified areas that they felt they implemented well and areas where they needed more guidance. For example, after the second meeting, participants in the group interview felt that the team improved upon their data review and problem definition steps but asked for clarification regarding team members' roles. Participants felt that the continued support and practice led to improved implementation over time.

In addition to continued practice, other participants felt that written materials helped the fidelity of the implementation process the most. During the initial training and support sessions, the researcher provided participants with a diagram of the TIPS steps, an outline for the order of the meetings, and questions the team should answer when discussing a student's case. School Psychologist 2 stated,

I believe the Student Assistance Team worked to implement TIPS with fidelity by using the TIPS outline provided as best as possible. Having a specific outline made it easier to follow the process with fidelity and could keep us accountable during our meetings.

While the written materials were helpful for some participants, others felt that the team still did not fully implement all aspects of the TIPS process consistently. For example, while the participants improved on their ability to complete the steps of the TIPS process, such as creating a hypothesis, some team members stated that they felt as though the hypothesis was not always explored in enough depth or explicitly defined as well as it could have been. Assistant Principal 2 stated,

I think the Student Assistance Team attempted to implement the TIPS process but was not successful in doing so with fidelity throughout the weeks of trial. I do think we got better at it as time went on. I think the team facilitator needed some additional training to lead implementation and that in general, the group sometimes missed or was too general with the step of hypothesizing and naming the problem.

Other participants also identified the facilitator's methods of leading meetings, differences between counselors presenting students' cases, and the amount and type of data gathered as relative weaknesses in the implementation process.

Overall, the data show that the Student Assistance Team effectively implemented the various aspects of the TIPS process by the end of the six observed meetings. According to the scores in the last three subsections of the DORA-II, the team improved their skills over time, and most participants agreed that their implementation skills improved. However, some participants stated they observed a need for the team to continue to build upon their skills to become even stronger by implementing this model.

Research Question Three

In what ways does the implementation of the Team-Initiated Problem-Solving process affect staff members' perception of the effectiveness of the Student Assistance Team?

The researcher collected data for the third research question through individual interviews conducted at the end of the study. When asked about the effect the TIPS process had on the Student Assistance Team meetings, every participant responded favorably. In addition, all the participants stated that the team's effectiveness significantly improved with implementing the TIPS process compared to meetings that occurred prior to the initial training. The major improvement areas were seen in meeting structure and member roles.

Meeting Structure

After coding the data for themes, the researcher found that most participants believed the TIPS process structure led to the greatest increase in the effectiveness and efficiency of the team. Participants stated that the meeting ran more effectively and produced more tangible outcomes with responsibilities assigned to team members than meetings prior to the training when many discussions would not produce solutions for members to try to implement. For example, School Counselor 8 said,

I think this is how all problem-solving meetings should be structured. It gives less time for teams to admire the problem and more time to develop solutions and set goals.

In addition, many participants spoke about how the TIPS process provided more focus and led the team to be goal-oriented rather than engaging in conversations about various topics unconnected to the student of concern.

Member Roles

While most of the participants believed that the Student Assistance Team meetings were more efficient because of the provided structure, many participants also spoke about how the set roles for each member positively impacted the team's effectiveness. Participants commented on the benefits of team members knowing what information to prepare in advance of the meeting and what to contribute to the discussion. School Counselor 5 said,

I found the TIPS process effective in that it helped the team stay on task and address all different components of the SAT in a timely manner, with all roles taken seriously. When everyone has a specific role to play, the ambiguity that got in the way previously was no longer an issue.

The specific roles helped the team move through the steps and reach outcomes during discussions.

Areas for Improvement

While all participants spoke about the benefits of the TIPS process, some felt that changes could be enacted to improve meeting effectiveness. For example, School Counselor 4 spoke about how sometimes students' issues were unclear or multiple problems made following the TIPS steps cumbersome or challenging. The counselor recommended implementing a procedure for when multiple problems existed. In addition, Assistant Principal 2 commented on how the team was missing a component of student voice, which they believed could have made the identification of the problem and brainstorming of solutions that would engage the student more effective.

Overall, participants reported that they found the TIPS process beneficial and effective when implemented during Student Assistance Team meetings. Participants appreciated the process's structure and the roles that helped to guide members' involvement in the discussions. While two Student Assistance Team members provided suggestions for continued improvements, all participants spoke about their observations of the benefits for the team.

Research Question 3a

What components of the Team-Initiated Problem-Solving process were most effective and why?

Overall, the participants found the TIPS process to improve the effectiveness of the Student Assistance Team meetings. Beyond the structure and roles included in the foundation of the TIPS process, participants felt that certain steps within the process led to more effective discussions and outcomes. Those steps included the problem and solution identification and matching.

Solution Identification and Plan

Participants felt the part of the TIPS process that led to the most positive change was the inclusion of the step of identifying a solution and creating an implementation plan. During the individual interviews, most participants spoke about the positive impact of ensuring that the team created an action plan for the student. Assistant Principal 2 stated,

Making sure to address goal setting and action planning allowed for actual steps toward a solution to be discussed and ultimately implemented. Goal setting and action planning were very important in establishing a “What now? What next?” mentality.

Likewise, the focus on solutions for students increased the team members’ perception of the effectiveness of the meetings.

Problem Identification

In addition to the benefits of creating a plan for students, approximately half of the participants also found that the problem identification stage improved the effectiveness of the Student Assistance Team meetings. Participants spoke about the benefits of closely examining the issues that the student may be experiencing to better match the student with an appropriate intervention. School Counselor 3 explained, “The problem identification stage was particularly helpful in that it asked team members to really drill down to root causes and to identify a primary cause of the behavior.”

Participants spoke about how collecting and presenting multiple points of data enhanced the team’s ability to interpret the student’s behavior and establish causes before moving into the solution phase. This process assisted the team in developing more effective solutions.

Research Question 3b

To what extent does implementing the Team-Initiated Problem-Solving process lead to more effective outcomes for the case presented, and why?

While most participants felt that the TIPS process led to more effective Student Assistance Team meetings, half of the participants felt they could assess the impact on students of the change in meeting procedures. The participants who felt as though they could not comment on this topic did not work directly with students who had been discussed at the observed Student Assistance Team meetings, or they believed that not enough time had passed to assess the impact on their students.

All participants who spoke about student impact perceived improvement in the student issue. For example, one school counselor reflected that she did not have quantitative data to show the outcomes; however, she believed that more solutions were produced by the team and that the implementation plan held those involved responsible, leading to a better outcome for the student. School Counselor 7 stated, “I took the action plan we created in SAT and implemented the interventions we discussed. My student was so receptive to the interventions the team came up with; I believe my student felt more supported!” In addition, School Counselor 5 said,

The TIPS process with the action plan of meeting up with the student again to check in with a clear goal in mind was helpful in helping me ensure the student was getting the support they needed or at least lay the framework for a comfortable working relationship with that student in the future should they need it.

Even though these participants perceived improved outcomes, they believe that more time is needed to further assess the impact on the students.

In explaining why the TIPS process led to more effective outcomes for students, many participants spoke about the collaboration among the team members as the group worked towards establishing a solution that could be implemented. The Student Assistance Team members engaged in the process asked questions about the concern and offered suggestions. Related Service Provider 1 stated,

I think the TIPS structure made it possible to receive valuable input from various team members in an effort to help students. The process facilitated the team to come up with clear ‘next steps’ for a scenario, and these next steps were ultimately beneficial to the students in question because specific actions were able to be taken to support them.

The Student Assistance Team was able to work together, follow the TIPS process, and create solutions for students.

Research Question Four

What elements of professional learning and support were most effective and why?

The researcher provided an initial training for the members of the Student Assistance Team and then utilized member feedback and the DORA-II scores to create brief support sessions at the beginning of subsequent Student Assistance Team meetings. The researcher utilized individual interviews to determine which aspects of the training were most beneficial for the participants. After coding the responses for themes, the researcher found three main components that participants viewed as most informative.

Support Sessions

First, approximately half of the participants found the support sessions at the beginning of each Student Assistance Team meeting to be the most beneficial for their learning process. The topics included in each support session were adapted to the team’s needs. For example, the researcher created support sessions on topics such as the structure of the meeting, steps included in the TIPS process, goal setting, members’ roles, creation of a hypothesis, and the inclusion of a coordinator and timeline in the implementation plan. School Counselor 4 reflected,

The feedback from you at review sessions was really helpful. Sometimes it’s hard to know where we could improve without that outside observer’s perspective. The support sessions helped us complete an ongoing review of the process and provided an opportunity to get clarification which was useful.

Interactive Activities

The researcher found that besides the support sessions, participants also found the role-play activity in the initial training and the written material about the TIPS steps beneficial for their learning process. A small group of participants discussed the examples and role-play activity during the final interviews. Participants found the role-play activity helpful because they could implement what they had learned about and receive feedback in a training setting before trying the TIPS process in a Student Assistance Team meeting.

Written Instructional Materials

Some participants found the written material about the TIPS steps to be the most helpful aspect because they could continue to refer to it throughout the Student Assistance Team sessions. School Psychologist 3 stated,

The forms were helpful as a guide of what to follow, and I really enjoyed the roles being more defined. It didn't feel like the counselor and student's team was on their own. Others stepped up more to provide insight. The forms provided reminders about what steps we needed to follow, which made it more comfortable for team members to chime in with thoughts.

Participants stated they found that the various models and materials provided multiple ways for team members to learn the information about the TIPS process to be beneficial.

Summary of Results

As a result of the initial training and continued support regarding the Team-Initiated Problem-Solving process, the Willow High School Student Assistance Team improved the efficacy and effectiveness of the meetings. This Improvement Science Dissertation in Practice focused on using the Student Assistance Team to identify, discuss, and provide support to students with high stress levels. The initial training included information about identifying students experiencing negative effects of stress that impacted various aspects of their lives.

Seventy percent of participants felt that their ability to identify students with high stress levels was strong prior to the training; however, those participants could still list new information they learned from the session. As the participants discussed students and reviewed data during the meetings, team members could use the learned information to examine observable signs and symptoms of the students' stress.

The Student Assistance Team members developed their ability to implement the TIPS process throughout the six observed meetings. A combination of qualitative and quantitative data showed improved implementation over time. Qualitative data showed that most of the participants felt that they had fully implemented TIPS by the end of the process, while the other small subset felt that they implemented the TIPS process but still had areas for continued improvement. The data from the DORA-II observation form also showed improvement in three areas over time. The scores in Problem Precision, Solution Identification, and Thoroughness all increased, while the Foundation Score fluctuated because of the levels of participant attendance at each of the meetings. The scores in the areas that increased showed participants' ability to identify the student concern, create a potential solution, and plan for the implementation of the intervention.

Participants were able to implement the TIPS process effectively, and they believed that it improved the effectiveness of the Student Assistance Team and the efficacy of the meetings. All participants spoke about the benefits of the TIPS process during individual interviews. A majority of the participants felt that the structure provided by the TIPS steps led to increased efficacy, while others felt that having specific roles for all members led to a more productive conversation. Within the TIPS structure, most participants identified the action and implementation planning as the most beneficial component. Other participants felt that the

problem identification step was essential for matching students with the appropriate interventions. Those team members who observed changes within students reported positive trends, which they attributed to the collaboration fostered by the TIPS process.

Participants felt that they successfully implemented the TIPS process because of various aspects of the training. Half of the participants believed that the support sessions offered at the beginning of each Student Assistance Team meeting were the most beneficial aspect of the training. During the sessions, participants could receive feedback and review components of the process that had not been fully implemented in the previous meeting. In addition, while the support sessions appeared to have the greatest impact on participants, the application of learning through role-plays and written information was also beneficial to the participants' learning process. Overall, the various modes of instruction led to participants' increasing ability to implement the TIPS process and the effectiveness of the Student Assistance Team meetings.

CHAPTER V: DISCUSSION

This study followed the Plan, Do, Study, Act cycle, including identifying a problem of practice, determining root causes, finding areas of potential change, and enacting one strategy to improve practice. The researcher identified high levels of student stress as an issue within Willow High School and implemented a training and support program for the Student Assistance Team members to improve their student identification and intervention services. The researcher collected qualitative and quantitative data to analyze the implementation of the Team-Initiated Problem-Solving process and the participants' views of their student identification abilities, the fidelity and feasibility of TIPS implementation, and the effect on students. This chapter includes a summary and discussion of the results, potential limitations of the study, and recommendations for future research and practice.

Summary of the Results

Using observations and individual and group interviews, the researcher collected quantitative and qualitative data to answer the research questions. Using the DORA-II observation form, the researcher recorded and analyzed quantitative data regarding the implementation of the TIPS process. The researcher also coded the participants' interview responses to obtain themes for each research question.

Identifying Students with Stress

Most participants involved in this Improvement Science Dissertation in Practice reported feeling confident in their ability to identify students experiencing high stress levels before the

initial training began. After the training, though, participants were able to identify new information they had learned, including factors to look for when assessing students' stress levels.

Implementing the Team-Initiated Problem-Solving Process

Based on the quantitative and qualitative data, the Student Assistance Team members' ability to implement the Team-Initiated Problem-Solving process with fidelity improved throughout this study. After observing six Student Assistance Team meetings, the researcher calculated scores in the areas of Foundation, Problem Precision, Solution, and Thoroughness according to the DORA-II form. The Foundation Score initially increased and eventually decreased because of some members' absences from the last three meetings. However, the Problem Precision, Solution, and Thoroughness scores all increased over time, with scores of 100% by the final meeting. These increasing scores and qualitative data collected from interviews indicated the team's improvement in identifying hypotheses regarding student issues, data to support conclusions, potential solutions, and an implementation plan.

Student Assistance Team Effectiveness

All participants believed that implementing the TIPS process led to more effective meeting practices. Most participants identified the recommended TIPS structures as the component that led to the most improvement. Participants believed that having an outline of steps to follow during the discussion led to an increased focus on determining the students' underlying issues and matching the students with appropriate interventions. Other participants said that assigning members roles increased efficiency because each participant knew what to contribute and when.

The participants who worked directly with the referred students reported perceived improvement in the students' issues. While the participants did not have quantitative data to

show a reduction in student stress levels, the participants felt that the solutions were beginning to create positive change. However, participants reported that more time was needed to continue to observe the changes and confirm the levels of effectiveness.

Professional Learning

The researcher provided participants with an initial training and provided follow-up sessions at the beginning of observed Student Assistance Team meetings throughout the intervention period. While approximately half of the participants felt that the ongoing support based on the team's needs was the most effective component of the teaching and learning process, another small group of participants believed that the interactive activities included in the initial training were the most beneficial aspect. The last members of the team believed that the written instructional materials provided in the training and support sessions were the most helpful as they learned to implement the TIPS structures.

Discussion of the Results

Improvement Science provides a way for scholarly practitioners to study an issue and implement change, in short, iterative cycles. The initial aim of this study was to improve the student identification and meeting practices of the Student Assistance Team to work towards the overall goal of reducing student stress levels at Willow High School. The researcher gauged the effectiveness of the training and support sessions through observations and individual and group interviews. Overall, the data showed that the Student Assistance Team members improved their ability to implement the TIPS process with fidelity leading to more effective meetings and the perception of improved student outcomes.

Student Identification

Most of the Student Assistance Team members felt proficient in identifying students with high stress levels prior to the study's initial training. Furthermore, they reflected that their initial abilities developed from professional schooling and experiences working in a high-achieving school. However, most participants could still list new information they learned during the training. For example, participants highlighted warning signs they will now look to observe in students, such as substance use, weight loss or gain, risky behaviors, school attendance, and health office visits. These indicators can assist Student Assistance Team members in identifying students who need higher levels of support.

While participants originally felt confident in their knowledge of stress, the team members' ability to identify new learning at the conclusion of the training indicated that the training was beneficial. As Splett et al. (2016) recommended, the training provided information regarding less observable internalizing behaviors. The participants' increase in knowledge could have been related to this presentation of stress indicators that are typically less observable or those that are not commonly connected to feelings of stress. The warning signs that staff identified as new learning are indicators that could often be attributed to other issues but, after closer examination, could be related to feelings of stress.

The intention of the stress identification training was to have staff members more accurately refer students to the Student Assistance Team. An unintended consequence of the intervention was a large increase in the number of students referred to the Student Assistance Team after the initial training. The increase in identified students may be related to team members' ability to connect student symptoms and behaviors with feelings of stress. These findings coincide with previous research, which shows that many school staff members

experience difficulty identifying signs of internalizing distress in students, reducing referral rates to support teams (Cunningham & Suldo, 2014; Splett et al., 2018). Once participants in this Dissertation in Practice recognized other stress symptoms, they were able to initiate discussions regarding support for more of their students.

Implementation of the Team-Initiated Problem-Solving Process

As evidenced by results from the DORA-II and qualitative interviews, the Willow High School's Student Assistance Team's ability to implement the TIPS process with fidelity increased. Furthermore, following the research by Todd et al. (2019), by providing a structure for the organization of the team, thorough information on the process, and protocols for the use of data and decision-making, the Student Assistance Team members were able to work effectively and efficiently to solve students' problems.

The improved implementation fidelity could be connected to the researcher's use of the scores from the DORA-II form to plan support sessions for the Student Assistance Team throughout the study. The researcher effectively used the DORA-II scores as a leading measure of change and adjusted the support session topics as needed because of the form's correspondence with the essential features of problem-solving meetings (Algozzine et al., 2016). The ability to assist teams with the process based on the DORA-II scores is strengthened by the interrater reliability found in multiple studies and the concordance of scores from the two raters in this Dissertation in Practice (Algozzine et al., 2016; Morrison et al., 2020). Creating responsive professional development and continued support based on formative assessment results is important for the school staff's learning process.

While the researcher supported the team's increasing abilities to implement the TIPS process with fidelity, there was a component that could not be controlled. Team members'

attendance at the meetings did not often meet the benchmark of 75% set by the DORA-II form, leading to lower Foundation Scores. According to school psychologists, the issues with attendance seen in this study are consistent with prior research that showed the lack of time available for implementing student support teams to be the most significant challenge (Fan et al., 2016). However, surprisingly, the lower attendance rates did not affect Willow High School's Student Assistance Team's ability to implement the TIPS process. The increase in implementation scores could be attributed to the continued diversity in team member roles. Despite the absences, the participants in attendance at each meeting were still representative of the whole team. Also, the members in direct contact with the student being discussed, such as the student's assigned counselor and assistant principal, were always present for those specific discussions.

As evidenced by the DORA-II scores for Problem Precision and Solution for the first few meetings, another challenge the team experienced was creating a hypothesis and developing a solution based on it. These findings align with previous research results. According to Todd et al. (2019), one of the most common issues seen in student support teams is defining a problem without precision and, therefore, planning solutions that do not address the root cause of the student's behavior. The researcher of this Improvement Science Dissertation in Practice included problem identification and solution planning in support sessions leading to the team's increased ability to complete this step. As shown in the participant interviews, though, there is room for continued improvement in this area.

Some team members felt more confident with problem analysis and creating a hypothesis than others. The researcher provided support sessions at the beginning of each Student Assistance Team meeting. As a result, participants who joined late or were absent from the

meeting did not receive the same information as other participants. This deficiency could have negatively affected those team members' understanding of the topic and implementation of that step in the TIPS process. Thus, further training and support for participants who feel less confident in their knowledge of problem identification and appropriate solution planning may be needed.

Student Assistance Team Effectiveness

Before implementing the TIPS process, Willow High School's Student Assistance Team members indicated that meetings were not effective. This sentiment aligned with prior research that showed a lack of rules, procedures, and guidelines for student support meetings led to concerns about student outcomes (Fan et al., 2016). Conducting meetings inefficiently can lead to frustration and failure to meet goals (Weist et al., 2018). Participants in this Dissertation in Practice reported feelings of increased effectiveness after implementing the TIPS structures and steps. Effective teams use a formal process to discuss student issues and make decisions (Weist et al., 2018).

TIPS provided participants with roles and structure, leading to increased efficiency in meetings and more effective outcomes for students. The participants' focus on the connection between assigned roles and increased team effectiveness was surprising. However, role confusion and lack of understanding of a team's structure can negatively impact a group's performance (Rosenfield et al., 2018). With structured roles, participants reported feeling more confident about speaking during meetings and providing case suggestions.

While offering organization is essential to improving efficiency, solely giving a team process steps does not lead to effective implementation (Algozzine et al., 2016). In this Dissertation in Practice, the continued support sessions and individual training provided to the

team's facilitator helped bolster the group's outcomes. Participants received feedback and made necessary adjustments throughout the intervention period leading to improved efficiency and effectiveness.

The participants reported believing that the implementation plans created by the Student Assistance Team were feasible. While Todd et al. (2019) demonstrated that sometimes student support teams could create student intervention plans that are too complex or demanding for implementation, the participants of this study did not reflect this sentiment. Those participants who implemented interventions with their students felt that the students' issues were beginning to improve. The team's development of reasonable intervention plans could be related to the participants' knowledge of students and the intricacies of the school system stemming from the participants' many years of experience at Willow High School.

Professional Learning and Support

Participants found the continuous support sessions, participatory training sessions, and written instructional materials helpful. At the end of each Student Assistance Team meeting, participants reflected on their implementation of the TIPS process and asked questions to increase their knowledge of the process. The reflections and questions helped inform the topics selected for future support sessions leading to more effective implementation. The team members indicated that the support sessions were the most helpful with TIPS implementation fidelity, showing that adjusting the training based on feedback is a strength of this study. Participants commented on the adaptive nature of the support sessions and the benefits of having an observer provide feedback. These results align with previous research that demonstrates initial training paired with continuous support and assistance leads to increased use of the TIPS procedures and

participants' perceptions of positive differences between meetings before and after training (Newton et al., 2011).

In addition to the support sessions, many participants also identified the interactive components of the initial training as aspects of the intervention that contributed the most to participants' increased knowledge and abilities. The participants' emphasis on this aspect of the training was surprising because of the limited time participants spent engaging in the activities compared to other aspects of the intervention. The initial training activities allowed participants to apply their knowledge and receive feedback before enacting the procedures in the actual meetings, leading to participants' feelings of increased comfort with the new learning. Furthermore, participants' desire to master the new techniques, as evidenced by their appreciation of opportunities for practice and constant requests for feedback during group interviews, may have led to increased implementation fidelity.

Limitations of the Results

This study aimed to improve the functioning of the Student Assistance Team at Willow High School. Participants' attendance at training sessions and meetings, lack of participant group representation, and time constraints may have limited the study.

Some participants could not attend the initial training session or all Student Assistance Team meetings. For example, four participants missed the initial training because of illness, an urgent school safety meeting, and a mandatory school accreditation meeting. These participants received individual training that differed from the group training because of the inability to replicate group activities and discussions. In addition, some participants missed Student Assistance Team meetings because of Planning and Placement Team meetings, illness, or other conflicts. While participants' absences from meetings did not affect the rest of the team

members' ability to implement the TIPS process and discuss student concerns, participants who missed the initial training or meetings may have had a different view of the most compelling aspects of the learning process or the team's implementation fidelity. Views of implementation fidelity could have been particularly affected for those participants who missed sessions at the end of the process when the team had improved their ability to engage in the TIPS process.

In addition to individual participant absences, groups of staff were not represented in the team. For example, the school nurses did not participate in the study or any Student Assistance Team meetings during the 2021–2022 school year because of their increased responsibilities regarding the COVID-19 pandemic. The nurses could have provided important information about student illnesses or health office visits that indicated student stress. There were times when the identified student's counselor collected the information from the nurses in advance of the meeting, but other times this information was not readily available. In addition to the nurses, there were no teachers involved in the Student Assistance Team meetings. Counselors collected teacher feedback in advance of the meetings, but teachers were not in attendance to offer their input regarding solution development.

Beyond participation limitations, another limitation was the time constraint because of the high school calendar and schedule and the limited time for the intervention. The Student Assistance Team meetings were planned around the high school's eight-day rotating schedule, school holidays, and team members' schedules. Some counselors reported that by the time the next Student Assistance Team meeting was scheduled to occur, sometimes multiple weeks after the student issue arose, the counselor had already worked with other staff to address the issue or the time for immediate intervention had passed, and the issue no longer needed to be discussed in the team setting. In addition, the overall timeframe for the Dissertation in Practice did not allow

for long-term data collection. Future studies should include measurements of prolonged implementation of the TIPS process and resulting student outcomes.

Recommendations for Practice and Further Study

This study was designed to address one specific aspect of a problem of practice identified at Willow High School. The study findings indicate a positive change in the practices of the Student Assistance Team. The researcher developed the following recommendations to foster continued team effectiveness and expand the work beyond Willow High School.

Recommendations for further research are also included.

Student Assistance Team Recommendations

While this Dissertation in Practice led to increased effectiveness in the Student Assistance Team members' ability to identify and provide support to students, there are opportunities for continued growth. The inclusion of other stakeholders, continued support for team members, and the assessment of the impact on students can all lead to improved Student Assistance Team practices.

Expanding the Team

The Student Assistance Team involved in this study included assistant principals, school counselors, school psychologists, and other related service providers. The counselors typically identified the students of concern and referred the students to the team. Teachers can also be a valuable resource for identifying and referring students experiencing high stress levels; however, many teachers report not having the necessary skills (Cunningham & Suldo, 2014; Splett et al., 2018). Therefore, as teachers are brought into the Student Assistance Team processes at Willow High School, they should receive training on the warning signs and symptoms of students experiencing high stress levels.

As part of the data collection step of the TIPS process prior to the initial meeting regarding students of concern, the school counselors spoke with teachers, students, and parents to gather the information that would be helpful to the team during the hypothesis and decision-making stages. Prior research shows that the more diverse a team is, the more effective the team can be (Torres-Rodriguez et al., 2010). Incorporating teachers from various academic departments, parents, and students can lead to success in developing and implementing more effective intervention plans; beyond collecting data from these stakeholders before the Student Assistance Team meetings, teachers, parents, and students should be invited to attend the meetings to provide input during the discussions. Furthermore, involving the student of concern in the meeting can increase the student's willingness to participate in the planned intervention.

Measuring Impact on Students

Once a student intervention is planned and enacted, the TIPS process involves monitoring the solution's impact, continuing to gather data, and making summative decisions (Algozzine et al., 2016). The Student Assistance Team at Willow High School currently utilizes more qualitative measures of student stress levels than quantitative to assess the necessity of interventions. The integration of quantitative measures such as the Perceived Stress Scale, a valid and reliable tool, could enhance the team's ability to assess students' stress levels and respond effectively to the challenges each student faces (Crone et al., 2016; Huang et al., 2020; Sharp Donahoo et al., 2018). Following the steps of the TIPS process, the team should also develop a schedule for continued check-ins regarding students actively engaged in interventions (Algozzine et al., 2016).

Future studies should be done to assess the effectiveness of the addition of quantitative measures and scheduled follow-up discussions regarding students. The TIPS process is cyclical,

utilizing data to continue to inform decisions at every step and ultimately leading to the potential end of the student's intervention. While the timeframe of this study did not allow for the observation of a full cycle from a student's initial referral to the student's completion of the intervention, more extended research studies in the future could assess the effectiveness of the ending stages of the TIPS process.

Continued Support and Training

Research has shown that student support teams usually do not sustain adequate high levels of implementation of problem-solving methods over time (Rosenfield et al., 2018). Therefore, the Willow High School Student Assistance Team should select a member to provide ongoing performance feedback, refresher training, and new staff training, as needed. The facilitator may also benefit from continued individualized sessions to bolster the team's effectiveness.

In addition, the use of checklists such as the one created as part of this study can also assist teams with continued implementation fidelity (Rosenfield et al., 2018). Therefore, to promote the Willow High School Student Assistance Team's continued use of the TIPS process, the members should continue to use checklists and question prompts such as the one seen in Appendix 4.

Longitudinal studies should be completed in the future to assess the long-term implementation of the TIPS process. Continued assessment of TIPS' implementation fidelity and beneficial aspects could lead to stronger practices and more effective student outcomes.

Willow High School Recommendations

While this study focused on one aspect of change within Willow High School, to meet the overall aim of reducing students' stress levels, staff will need to enact further changes such as those identified on the driver diagram shown in Figure 3. The practices of the Student Assistance Team focus on those students experiencing the highest levels of stress. If students are taught skills to manage stress levels as part of a comprehensive schoolwide social-emotional learning program, the number of students needing higher levels of support may decrease. Staff can teach students stress reduction techniques such as mindfulness and meditation, which could positively impact how students cope with challenges (Durlak et al., 2015; Gouda et al., 2016). A comprehensive social-emotional learning program can take time to develop and implement; however, the outcomes would help Willow High School staff achieve the goal of reducing students' stress and reduce the number of students referred for higher levels of support.

Willow High School and Beyond—Expansion of TIPS Practices

As evidenced by the positive results of this study, other student support teams, schools, and districts may benefit from the implementation of the TIPS process. For example, the Willow School District began studying their student support teams in the 2020–2021 school year at all grade levels. As the district staff makes changes at the elementary and middle school levels, they could implement the TIPS process as research has shown the process also to be effective with these grade levels (Algozzine et al., 2016).

In addition to expanding the practices within the district, the data from the environmental interviews with administrators from other high schools also showed a need for effective problem-solving team practices. The information from this study could help other high school administrators make decisions regarding the implementation of systems in their schools.

In integrating the TIPS process in other schools in Willow, or other districts, beneficial aspects of the study, such as group discussion and role-play activities during the initial training, should be utilized to optimize the team members' learning opportunities. In addition, continued support sessions as the Student Assistance Team implemented the TIPS procedures should also be incorporated in the future since the sessions proved to be the most beneficial aspect of implementation fidelity. Schools could select one person to be the implementation coordinator to continuously provide support and training sessions as needed.

Potential changes to what was incorporated in this study could include offering multiple training sessions to allow all participants the opportunity to engage in group activities regardless of their schedule, time for individuals to receive more personalized support based on their roles, and the inclusion of a more diverse team to allow for multiple perspectives regarding student issues. As evidenced by this study, the team facilitator may need additional training and support as they learn to lead meetings utilizing this new format. The data collector and person reporting on the student case may also need guidance on the specifics of the data integration with the TIPS process.

Further research should be conducted to measure the impact in schools with different cultures and systems. The participants in this study were enthusiastic about the potential benefits of changing the structures of the Student Assistance Team; however, this may not be the case in all schools, which may alter outcomes. In addition, replicating this study in other settings such as elementary or middle schools and schools in rural and urban settings could yield informative results.

Conclusion

Student stress levels have continued to rise nationally and at Willow High School throughout recent years (American Psychological Association, 2014, 2020). Through empathy interviews, Willow High School staff identified student stress as an issue that needed to be addressed to support students' social, emotional, and academic wellbeing. This Improvement Science Dissertation in Practice involved changing one aspect of the school's system as a first step in creating a positive impact on the problem of practice. The researcher selected the high leverage driver involving identifying students experiencing high stress levels and the Student Assistance Team's procedures to determine interventions for those students. This study is significant because it addressed the immediate need to effectively support students experiencing the highest levels of stress and emotional crisis at Willow High School.

The study utilized an action research methodology and mixed-methods design to implement change and evaluate the outcomes. The researcher provided participants with training to identify students with high stress levels and implement the Team-Initiated Problem-Solving process. By conducting and analyzing the results of interviews and observations, the researcher provided continuous support for the Student Assistance Team members for the duration of the study. The results showed a positive change in participants' ability to identify students and implement the TIPS procedures.

The use of the Improvement Science framework led to meaningful change in the Student Assistance Team's practices at Willow High School. In addition, the training and support sessions led to increased staff capacity as the participants gained knowledge, engaged in structured discussions, and collaborated to improve outcomes for students.

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APPENDIX 1:

Invitation with Consent Statement

Hello,

As part of my Doctorate in Educational Leadership program at Sacred Heart University, I am conducting a study regarding identifying students with high stress levels and the effects of using the Team-Initiated Problem-Solving protocols (specific agenda and procedures) for Student Assistance Team meetings. The study involves training on the protocols, and then data will be collected through observations of SAT meetings and individual/small group interviews. The interviews will last approximately 45 minutes and will be conducted in a space that will protect confidentiality. No names will be recorded as part of the data collection process to further protect confidentiality. Participation is completely voluntary, and participants will be asked to complete a consent form before engaging in the study. There are no known risk factors associated with this study.

Sincerely,

Kaitlin Stanton

Addressing Student Stress: The Impact of Training on Student Assistance Team Practices

Invitation and Consent Form

Why are you receiving this invitation?

You are receiving this invitation because you have experience with our Willow High School students and are a member of our Willow High School Student Assistance Team.

What will you be asked to do?

If you choose to participate in this study, I will observe the use of the Team-Initiated Problem-Solving method (which you would be trained on) in the Student Assistance Team meetings for 4–6 weeks. Participants will also be asked to participate in up to two interviews, each lasting approximately 45 minutes, both of which would focus on stress in our students and the Student Assistance Team meeting processes.

Is participation voluntary?

Yes. You may choose to participate or not. I respect that you may be very busy and appreciate you taking the time to read this invitation. If you feel that this study would help make our processes of supporting students stronger, please consider participating.

How will I be protected if I choose to participate?

There will be no identifying characteristics associated with your responses, only your job role. All interviews will be conducted in a space that will protect confidentiality. No names will be recorded as part of the data collection process to further protect confidentiality.

What are the risks and benefits of participating?

There are very minimal risks to participating in this study. The benefit of participating is the opportunity to improve our practices surrounding identifying and supporting students

experiencing high levels of stress. If you do participate, you may ask to skip any questions you don't want to answer.

Contact Information: If you have any questions about this research study, you may contact me via email or call me at ext. 2347. If you have any questions about your rights as a participant in a research study, you may contact Sacred Heart University Institutional Review Board at alpfl@sacredheart.edu or #203-396-8241.

If you are interested in participating, please complete the fields below and return this form to Kaitlin Stanton in the Guidance Office.

I have read the information about the study titled "Stress in a High-Achieving High School: An Improvement Science Project" and consent to participate in this study.

Name: _____

Signature: _____

Date: _____

APPENDIX 2:

DORA-II Observation Chart

DORA (Decision Observation, Recording, and Analysis) II																																																																																																																																																																																																			
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APPENDIX 3:

Group and Individual Interview Questions

Group Interview Questions:

What components of the TIPS protocol did the team implement well and why?

What components of the TIPS protocol did the team not implement well, and why?

What part of the TIPS protocol do you feel that you might need more training on?

How is the TIPS protocol helping or hindering the support of students experiencing high stress levels?

Individual Interview Questions:

How well do you think the members of the Student Assistance Team (SAT) understand the purpose and function of the SAT? Why?

Are there things that make it difficult to promote the purpose/function of SATs?

What do you see as the strengths and weaknesses of the referral and action planning process?

Which components of the TIPS process are most/least important to your team? Why?

In what component(s) of the TIPS process, if any, do think your team excels?

What effects has implementing the TIPS protocol had on your practices? On the team's practices?

What effect has implementing the TIPS protocol had on the outcomes for each student case that was presented?

Describe your ability to identify students experiencing high stress levels.

Have you noticed a change in your abilities from the beginning of the intervention to the end?

What aspects of the initial professional development were most helpful? Least helpful? Why?

What aspects of the support provided in the beginning of each meeting were most helpful? Least helpful? Why?

APPENDIX 4

TIPS Steps and Questions to Ask

Foundation:

- Start & end on time
- High attendance
- Agenda available
- Roles filled (facilitator, notetaker, data analyst)

Problem Identification:

- What is the problem?
- Is this important enough to address?
- Who? What? Where? When?
- What data shows us this problem?

Hypothesis Identification:

- Why is this problem occurring? (Can use sentence starter: "Stress appears to be related to....")

Goal Identification:

- What would we like to be the ultimate outcome?
- What change would we see to signal that we have supported the student/stress has been reduced?

Action Plan:

- How do we reach the goal?
- What steps will be implemented, and by whom?

Summarize/review as needed