FACTORS THAT PREDICT ACCESS TO SAP RECOMMENDATIONS

Examining Student Assistance Program Data in a Rural Public School to Determine Which

Factors Predict Access to Student Assistance Program Team Recommended Services

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ABSTRACT

Mental health and substance use are major concerns for youth across the nation, particularly with poor mental health on the rise. Student Assistance Programs (SAPs) have been put in place so that students in need of services can be referred to these programs and get appropriate services recommended to them. However, there has been a lack of specific data analysis on SAPs. The purpose of this study was to find predictive factors that impact which students access services that are recommended through the SAP program. Spearman's correlations, binary logistic regressions, and a binomial test were utilized to see if there were predictive factors for receiving written permission, accessing school services, and accessing community services. One predictive factor that was found in this study was that as grade level increased, the likelihood of receiving parent permission to proceed with the SAP process (and thus getting recommended services) decreased. The study also found that students who are recommended for school services are highly likely to access those services. However, the data showed that academic supports had the lowest rate of being accessed. Another major finding that was uncovered was that receiving parent permission to proceed with the SAP process was a major barrier to accessing services. Analyses from this study indicate a need to further investigate the obstacles that prevent parents from giving permission to proceed with the SAP process.

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TABLE OF CONTENTS

ABSTRACT4
ACKNOWLEDGMENTS
TABLE OF CONTENTS
LIST OF TABLES
CHAPTER 1: INTRODUCTION
Definition of Terms14
CHAPTER 2: REVIEW OF THE LITERATURE15
Mental Health in the U.S 15
Mental Health Outcomes
Substance Use
Disparities among Disorders
Race and Ethnicity
Gender
LGBTQ+
Socioeconomic Status
Rural Residents
Individuals with Disabilities
Treatment for Mental Health and Substance Use
Disparities in Receiving Treatment
Barriers to Receiving Treatment
School Involvement with Mental Health
Student Assistance Programs

SAPs in Pennsylvania
Background
Structure and Process
Research on PA SAPs43
Conceptual Frameworks 50
Theoretical Framework
Summary
CHAPTER 3: METHODOLOGY
Data Analysis
Data Collection
Population
Limitations and Delimitations
Summary
CHAPTER 4: RESULTS
Data Coding65
Descriptive Statistics
Research Question 1
Research Question 2
Research Question 3
CHAPTER 5: DISCUSSION
Conclusions73
State and District Data73
Research Questions75

Additional Findings	76
Implications	77
Limitations	80
Future Research	
Summary	
REFERENCES	85
APPENDIX A: 2023-2024 School Year PDE 4092	
APPENDIX B: Instructions for Completing the 2023-2024 PDE 4092	
APPENDIX C: PA SAP State Summary Data for the 2023-2024 School Year	110
APPENDIX D: PA SAP TASD Summary Data for the 2023-2024 School Year	114

LIST OF TABLES

Table 1. Spearman's Correlations for Written Permission for SAP Process	69
Table 2. Spearman's Correlations for School Service Accessed	70
Table 3. Proportions for School Services Accessed by Service Type	72
Table 4. Spearman's Correlations for Community Service Accessed	73

Examining Student Assistance Program Data in a Rural Public School to Determine Which Factors Predict Access to Student Assistance Program Team Recommended Services

Chapter 1: Introduction

Although the term "mental health" has become a prevalent topic in our nation, it is more than just a buzzword. An individual's mental health affects how they function in several aspects of life and can impact the overall quality of life they can lead. Of particular concern is children's mental health as they grow and develop. Unfortunately, poor mental health is on the rise for our youth. This affects students' academic achievement, relationships, behaviors, and even physical health (Bitsko et al., 2022). Substance use, which is closely tied to mental health, is also a concern for our youth, especially for adolescents. However, the worst possible outcome of poor mental health is suicide. Tragically, suicide rates, as well as suicidal thoughts and suicide attempts, are also increasing (Bitsko et al., 2022). While treatment is available for children who are struggling with mental health, only half of the children who need these services receive them (Health Resources and Services Administration Maternal and Child Health Bureau, 2020; Sanchez et al., 2018; Whitney and Peterson 2019).

In addition, research shows that there are disparities among certain groups when it comes to poor mental health and substance use, as well as those who receive treatment, including certain racial and ethnic groups, gender, LGBTQ+ status, socioeconomic status, geographic location, and disability status (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2021a; Centers for Disease Control and Prevention, 2023b; Centers for Disease Control and Prevention, 2023d; Centers for Disease Control and Prevention, 2024b; Cho et al., 2007; Ghandour et al., 2019; Gu et al., 2022; Health Resources and Services Administration Maternal and Child Health Bureau, 2022; Kessler et al.; 2012; Khan et al., 2023; Lipari et al., 2016; Lu, 2017; Merikangas et al., 2011; National Institute on Drug Abuse, 2020; Olivier et al., 2020; Reiss et al., 2019; U.S. Department of Health and Human Services, 2024; Vergunst et al., 2023; Winstanley et al., 2012; Zablostky & Terilizzi, 2020; Zimmerman, 2005). Although this current study will not look directly at LGBTQ+ status, socioeconomic status, and geographic location factors as data, the literature review for this study delves into these factors as they show prominent disparities in the mental health field. These factors should be considered when interpreting the results of this study, and Student Assistance Program (SAP) teams should keep these disparities in mind as they are working with students and families. Moreover, the school district in this study has a high percentage of students that are low-income, and the school district is located in a rural community. Again, these factors should be taken into consideration when interpreting this study.

With the increasing need to address the mental health of students, schools are often faced with this task and play a vital role in assisting students and families. One way schools address this need is through Student Assistance Programs, or SAPs. SAPs are utilized across the nation to help students who encounter barriers to their learning and overall success by connecting them to school and community services. Although SAPs are utilized throughout the country, this study focuses on SAPs within the Commonwealth of Pennsylvania. In Pennsylvania (PA), SAPs are a legal requirement in all public schools for grades K-12 (Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2023; Commonwealth SAP Interagency Committee, 2004b).

PA SAPs follow a specific framework and process and have been evaluated to determine indicators of effective SAPs (Fertman et al., 2000). Fertman et al. (2000) found that one of the essential components of SAPs in PA was the continual monitoring of the SAP process and the

implementation of improvement plans to ensure the SAP is working to the best of its ability to assist students. This is similar to national research on SAPs which indicates that an essential component of SAP is ongoing evaluation of the programs (Kanu et al., 2015, Moore & Forster, 1993; Vincent et al., 2019; Wagner et al., 2004). Furthermore, the Whole School Whole Community Whole Child (WSCC) framework by the Centers for Disease Control and Prevention (CDC), which is a framework for addressing health needs (including mental health) in schools, supports the use of evidence-based practices (Centers for Disease Control and Prevention, 2023a).

Both national and PA SAPs have been proven to be a successful way to link students to services they need (Anderson et al., 2017; Biddle et al., 2014; Bitsko et al., 2022; Commonwealth SAP Interagency Committee, 2004b; Fertman et al., 2003; Kanu et al., 2015; Sekhar et al., 2024; Vincent et al., 2019; Winstanley et al., 2012). However, there has been limited analysis of SAP data, despite the fact that SAPs promote an evidence-based approach. Particularly, many of the common disparities that have been found in other mental health research have not been analyzed within SAPs. In addition, not all students who are recommended to SAP end up receiving school or community services. This study aims to get a preliminary analysis of SAP data; since the goal of SAP is to get students connected to services, this study is specifically looking at which students access the services and analyzing if there are factors that predict which students access the services. The goal of this study is similar to Ronald Andersen's Behavioral Model of Health Services Use (BMHSU), a theoretical framework that is used to identify factors that can impact health service usage with an overarching goal of increasing access to health services for all individuals (Andersen & Newman, 1973). The following research questions were analyzed in this study: (1) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, or incoming referral reason impact the probability of students receiving written parent permission to proceed with the SAP process? (2) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary school service recommended by SAP team impact the probability of students accessing recommended school services? (3) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary school services? (3) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary community service recommended by SAP team impact the probability of students accessing recommended community services?

The data for this research was collected from a small, rural, public school in Wyoming County, Pennsylvania. All PA SAP teams are required to collect data for each SAP referral the team receives on a statewide form, called the PDE 4092, which is used in this study. The data from this study is from the 2023-2024 school year. The results from this study can provide specific information for the school district in which the data was collected but can also serve as a starting point for additional analysis of data for other SAP teams. The study can help evaluate the strengths and needs of SAP so that areas of weakness can be addressed, allowing for the maximum number of students to access recommended services. It can also lead to further studies, such as replication studies or qualitative studies, that can analyze this data further.

Research shows a clear need for mental health and drug and alcohol services for our youth. SAPs are already in place and have a good foundation for connecting students to services. In addition, in Pennsylvania, there is already a data collection system in place statewide for SAP referral cases. The goal of this study is to begin to analyze this data and improve an already fundamental program so access to services can be increased and, in turn, increase academic success and quality of life among our youth.

Definition of Terms

Externalizing behavior- behaviors "characterized primarily by actions in the external world, such as acting out, antisocial behavior, hostility, and aggression" (American Psychological Association, 2018a, APA dictionary entry "externalizing-internalizing") *Internalizing behavior-* behaviors "characterized primarily by processes within the self, such as anxiety, somatization, and depression" (American Psychological Association, 2018a, APA dictionary entry "externalizing-internalizing")

Mental health- "a range of mental, emotional, social, and behavioral functioning...occurs along a continuum from good to poor" (Bitsko et al., 2022, para. 1)

Mental disorder- "any condition characterized by cognitive and emotional disturbances, abnormal behaviors, impaired functioning, or any combination of these" that may also be referred to as "mental illness; psychiatric disorder; psychiatric illness; psychological disorder" (American Psychological Association, 2018b, APA dictionary entry 'mental disorder') *Student Assistance Program (SAP) Assessment-* "determines if treatment is needed and what level of care is needed" (Pennsylvania Network for Student Assistance Services, 2021, p.22) *Student Assistance Program (SAP) Liaison-* "representatives from the county's mental health and drug and alcohol systems... One of the roles of the SAP liaisons that sit on SAP teams is to screen and/or assess referred students, if warranted, in order to offer recommendations to SAP team members and the student's family" (Pennsylvania Network for Student Assistance Services, 2021, p. 7, 9-10)

Student Assistance Program (SAP) Screening- "can identify areas of concern and determine if further evaluation is necessary. A screening does NOT determine if treatment is needed nor what

level of care might be needed." (Pennsylvania Network for Student Assistance Services, 2021, p.22)

Student Assistance Programs (SAPs)- "a comprehensive, school-based framework, designed to provide a variety of services, including (1) education, (2) prevention, (3) early identification, (4) evidence-based intervention, (5) referral processes, and (6) guided support services for students in kindergarten through grade 12 who are exhibiting a range of risk factors that interfere with their educational success (Vincent et al., 2019, What is a Student Assistance Program section). *Substance use disorder-* "a cluster of physiological, behavioral, and cognitive symptoms associated with the continued use of substances despite substance-related problems, distress, and/or impairment, such as impaired control and risky use. In *DSM–5* and *DSM-5-TR*, the diagnosis combines and replaces the previous diagnoses of substance abuse and substance dependence from *DSM–IV–TR*" (American Psychological Associate, 2023, APA dictionary entry 'substance use disorder')

Chapter 2: Review of the Literature

Mental Health in the U.S.

An essential component of a person's overall well-being is their mental health. Mental health is a continuum of cognitive, emotional, social, and behavioral functioning (Bitsko et al., 2022). An individual's mental health affects how they function in home, school, community, work, and social environments as well as how they think, feel, act, handle stress, relate to others, and make choices (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2023b). A significant deficit in mental health can be diagnosed as a mental disorder. According to the American Psychological Association (2018b), a mental disorder is "any condition characterized by cognitive and emotional disturbances, abnormal behaviors, impaired functioning, or any

combination of these" that may also be referred to as "mental illness; psychiatric disorder; psychiatric illness; psychological disorder" (APA dictionary entry 'mental disorder'). Mental disorders are associated with poor physical health, substance use, and crime, and can negatively impact education, employment, income, and relationships (Bitsko et al., 2022).

On a national level, poor mental health and diagnoses of mental disorders among children are increasing. The most common mental disorders among children are attentiondeficit/hyperactivity disorder (ADHD), anxiety, behavior disorders, and depression; with the exception of behavior disorders, the prevalence of these disorders has continued to increase since 2000 (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2023b; Health Resources and Services Administration Maternal and Child Health Bureau, 2021). Approximately 10% of children (ages 3-17) are diagnosed with ADHD, 9% are diagnosed with anxiety, 9% are diagnosed with behavior disorders, and 4% are diagnosed with depression (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2023b). Although only 4% of children ages 3-17 have a diagnosis of depression, approximately 21% of children ages 12-17 years old have experienced a major depressive episode (Bitsko et al., 2022). In addition, comorbidity is also a concern with mental disorders. For children diagnosed with depression, 74% also had a diagnosis of anxiety and 47% had a diagnosed behavior disorder; 38% of children with anxiety had an additional diagnosis of depression and 32% had an additional diagnosis of a behavior disorder; 37% of children diagnosed with a behavior disorder had anxiety and 20% had depression (Centers for Disease Control and Prevention, 2023b). Furthermore, each year, one out of five children will be diagnosed with a mental disorder and two out of five children will be diagnosed with a mental disorder before they are 18, with half of all mental disorders occurring at the onset of 14-years-old or younger (Bitsko et al., 2022).

The worst outcome for poor mental health is suicide. Unfortunately, suicides, suicidal thoughts, and suicide attempts also have increased since 2000 (Bitsko et al., 2022). Suicide was the second leading cause of death for people ages 10-29 during the years 2011-2019 and almost 50,000 people died by suicide in 2022, with an additional 1.6 million attempting suicide, and 13.2 million people considering suicide (U.S. Department of Health and Human Services, 2024). Suicide rates have increased almost 13% since 2012 (U.S. Department of Health and Human Services, 2024). In Pennsylvania alone, more than 2,000 people a year lose their lives to suicide (Prevent Suicide PA, 2023).

To learn more about mental health and suicidal thoughts and behaviors among adolescents, the Centers for Disease Control and Prevention (CDC) collects surveillance data biannually from a nationally representative sample of U.S. high school students as part of the Youth Risk Behavior Survey (YRBS) (Centers for Disease Control and Prevention, 2024b). The most recent data collected from the YRBS looks at both ten-year trends from 2013-2023 and two-year trends from 2021-2023 and shows some alarming data. Overall, ten-year trends show worsened mental health, including increased percentages of students who: experienced persistent feelings of sadness or hopelessness, seriously considered attempting suicide, made a suicide plan, and attempted suicide. In 2023, 40% of students experienced persistent feelings of sadness or hopelessness; 29% experienced poor mental health; 20% seriously considered attempting suicide; 16% made a suicide plan; and 9% attempted suicide. Although there was a positive change from 2021-2023 with a decrease in the percentage of students who experienced persistent feelings of sadness or hopelessness from 42% to 40%, the ten-year trend data shows an increase of 10%. All other mental health indicators did not show a significant change (Centers for Disease Control and Prevention, 2024b).

In comparison, the Commonwealth of Pennsylvania conducts its own bi-annual survey to gather risk data for students in grades 6-12 called the Pennsylvania Youth Survey (PAYS) (Pennsylvania Commission on Crime and Delinquency et al., 2023). Part of PAYS asks students participating in the survey questions about mental health, including mental health concerns and suicide risk. In 2023, PAYS found that 37% of students felt depressed or sad most days in the past year; 36% think, at times, they are no good at all; 24% think that they are a failure; and 15% have self-harmed in the past year. The data from PAYS regarding suicide risk shows lower percentages for Pennsylvania students than the previously mentioned national student data from YRBS, although the results are still remarkable: 27% percent of students responded that they were so sad they stopped doing usual activities; 16% seriously considered suicide; 13% made a suicide plan, and 5% attempted suicide (Pennsylvania Commission on Crime and Delinquency et al., 2023).

Mental Health Outcomes

As stated earlier, a person's mental health can impact how they function in multiple facets of their lives. Unfortunately, those with poor mental health and/or mental disorders are often faced with poor outcomes across several domains. When looking at symptoms associated with poor mental health, they are frequently categorized into either externalizing or internalizing behaviors. Externalizing behaviors are often more noticeable and disruptive and include behaviors such as hyperactivity, impulsivity, aggression, inattention, opposition, defiance, or other delinquent behaviors; internalizing behaviors can be less noticeable and include worrying, anxiety, depression, social withdrawal, lack of interest or pleasure in activities, negative moods or emotions, and obsessions or compulsions (Achenbach, 1966; Esch et al., 2014; Olivier et al., 2020; Raknes et al., 2017; Sau Man Ng & Sui Ling Ng, 2022; Vergunst et al., 2023). Those that suffer with externalizing or internalizing symptoms may face negative outcomes, including unemployment, criminal convictions, lower earnings, receipt of welfare, relationship difficulties, poor health, and earlier mortality (Vergunst et al., 2023). In addition, both externalizing and internalizing symptoms are associated with school difficulty, including underachievement, academic failure, school disengagement, and dropout (Olivier et al., 2020). A meta-analysis by Sau Man Ng and Sui Ling Ng (2022) determined that the COVID-19 pandemic posed an increased negative effect on students' mental health outcomes for both externalizing and internalizing symptoms.

More specifically, for behavior and conduct disorders (externalizing disorders), Bitsko et al. (2022) stated that there were associations with an increase in educational and occupational failure, substance use, mental disorders, injury, violence, delinquency, and lower life expectancy. For mood disorders (an internalizing disorder), there is an association with school dropout and suicidal ideation (Esch et al., 2014). Anxiety (an internalizing disorder) is associated with poor educational outcomes, having additional mental disorders, physical health concerns, poor relationships, and an overall poor high quality of life (Bitsko et al., 2022; Esch et al., 2014; Raknes et al., 2017), while depressive symptoms (internalizing symptoms) are associated with having additional mental disorders, increased physical health conditions, difficulties in school, increased self-harm and suicide rates, and increased alcohol, drug, and eigarette use (Bitsko et al., 2022; Esch et al., 2014; Pennsylvania Commission on Crime and Delinquency et al., 2023; Raknes et al., 2017). Furthermore, Prevent Suicide PA (2023) states that depression is one of the biggest risk factors for suicidal thoughts, and data from PAYS indicated that students with depressive symptoms had 12 times the rate of those without depressive symptoms for using cigarettes, 8 times higher for marijuana use, and four times higher for alcohol use (Pennsylvania Commission on Crime and Delinquency et al., 2023).

Substance Use

Substance use is an additional concern for students that is closely tied to mental health. The good news is that over the past ten years, substance use in high school students has declined, including the number of students who used alcohol, marijuana, illicit drugs (cocaine, inhalants, heroin, methamphetamines, hallucinogens, or ecstasy), and misused prescription opioids (Centers for Disease Control and Prevention, 2024b). The most common substance that high school students used within the past 30 days in 2023 was alcohol, with 22% of students reporting its use, followed by 17% of students reporting using marijuana in the past 30 days; 12% reported ever misusing opioids, 10% reported ever using illicit drugs, and 4% reported misusing prescription opioids within the past 30 days (Centers for Disease Control and Prevention, 2024b). In Pennsylvania, in 2023, students from grades 6-12 reported the following: 29% ever used alcohol, 14% vaped or used e-cigarettes, 12% used marijuana, and 6% used cigarettes; under 5% participated in binge drinking, used inhalants, smokeless tobacco, over-the-counter drugs to get high, prescription pain relievers, hallucinogens, prescription stimulants, or synthetic drugs (Pennsylvania Commission on Crime and Delinquency et al., 2023). Less than one percent reported ever using the following drugs: prescription tranquilizers, performance-enhancing drugs or steroids, cocaine/crack, ecstasy/molly, methamphetamine, and heroin (Pennsylvania Commission on Crime and Delinquency et al., 2023).

Although the percentages of use have declined, the number of students using substances is still concerning. Similar to outcomes for those with poor mental health, outcomes for substance use are unfavorable. Like poor mental health, substance use can lead to poor quality of life, problems with physical health, difficulties with relationships, poor economic outcomes, increased mental illness, increased involvement with crime, negative school outcomes, and lower life expectancy (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2022; Cho et al., 2007; Khan et al., 2023). Additionally, substance use can have negative impacts on verbal and visual learning, language abilities, memory, and visuospatial construction (Hanson et al., 2011), as well as an increased risk for violent and risky behaviors, teen pregnancy, and sexually transmitted infections/diseases (Cho et al., 2007; Hoots et al., 2023). Finally, other devasting outcomes for substance use among adolescents are the increasing prevalence of alcohol-related deaths and overdoses (Hoots et al., 2023), as well as motor vehicle deaths related to substance use (Bitsko et al., 2022).

Substance use is often connected to mental health. Many who suffer from a substance use disorder also have a dual diagnosis of a mental health disorder (Khan et al., 2023; Winstanley et al., 2012). According to Winstanley et al. (2012), one-third of adolescents with a substance use disorder struggle with mental health issues. Substance use and poor mental health are a double-edged sword; substance use can cause poor mental health, but poor mental health can lead to substance use (Khan et al., 2023). Substance use can be an antecedent to depression and other suicide risk factors (Cho et al., 2007). In addition, substance use in adolescence can lead to substance use disorders (Centers for Disease Control and Prevention, 2022; Cho et al., 2007; Hoots et al., 2023); the majority of individuals with substance use disorders started using substances in adolescence (Centers for Disease Control and Prevention, 2022). Poor mental health, persistent feelings of sadness or hopelessness, suicidal ideation, physical abuse, and emotional abuse are all risk factors of substance use, which many students experienced throughout the COVID-19 pandemic (Hoots et al., 2023). In a study by Connolly et al. (2024), the researchers reported that some of the most common reasons adolescents reported using substances were "to feel mellow, calm, or relaxed," "to sleep better or to fall asleep," "to stop worrying about a problem or to forget bad memories," and "to help with depression or anxiety" (Reasons Reported for Using Substances section). This suggests that some adolescents may utilize substances to deal with mental health struggles.

Disparities Among Disorders

Mental health and substance abuse disorders do not affect everyone equally. There are disparities among different groups of people, including certain races and ethnicities, genders, sexual orientations/gender identities, socioeconomic status, geographic locations, and disability status. Being knowledgeable about these disparities can help individuals acknowledge biases, address barriers, and understand underlying issues and interactions with the ultimate goal of improving outcomes for all persons affected by mental health and substance disorders.

Race and Ethnicity

A person's race and ethnicity may influence the likelihood of being affected by poor mental health. In general, racial and ethnic minorities are disproportionately affected by both suicide and suicide attempts (U.S. Department of Health and Human Services, 2024). When looking at the YRBS, American Indians or Alaska Natives had the highest percentages for having experienced persistent feelings of sadness or hopelessness and poor mental health, having seriously considered attempting suicide, and having made a suicide plan (Centers for Disease Control and Prevention, 2024b). Furthermore, research presented by Bitsko et al. (2022) states that adolescent suicide rates are higher among American Indians/Alaskan Natives. One area that affects White children is the prevalence of anxiety (Bitsko et al., 2022; Ghandour et al., 2019). When looking at externalizing disorders, Black children are disproportionately affected by behavior and conduct disorders (Bitsko et al., 2022; Ghandour et al., 2019). Bitsko et al. (2022) note, however, that racial bias should be taken into consideration and that behavior and conduct disorders among Black children could be over-diagnosed. Both Black and White children have the highest prevalence of ADHD (Bitsko et al., 2022). Regarding substance use disorders, Hispanic and White adolescents have the highest rates (Bitsko et al., 2022).

Gender

Gender can also play a role in the impact of mental health on an individual. Overall, on the YBRS, more females reported experiencing poor mental health than males (Centers for Disease Control and Prevention, 2024b). Vergunst et al. (2023) found that females were more likely to experience internalizing behaviors than males. This is consistent with several other studies that report specific internalizing behaviors. The YRBS found that females, more often than males, reported that they: experienced persistent feelings of sadness or hopelessness, experienced suicidal thoughts and behaviors, seriously attempted suicide, and made a suicide plan (Centers for Disease Control and Prevention, 2024b). Similarly, Bitsko et al. (2022) reported that depression, suicidal ideation, and attempted suicide were more prevalent in adolescent females, and Cho et al. (2007) found that adolescent females had more depressive symptoms, suicidal ideation, and suicide attempts than adolescent males. Interestingly, however, Bitsko et al. (2022) reported that male children had higher suicide rates. Moreover, regarding internalizing disorders, Kessler et al. (2012) found that adolescent females had higher rates of mood, anxiety, and eating disorders, although a more recent study found that anxiety rates were similar between male and female children (Bitsko et al., 2022).

Males, on the other hand, are more impacted by externalizing disorders (Olivier et al., 2020; Vergunst et al., 2023). Bitsko et al. (2022) reported that ADHD and behavior disorders

among children were approximately doubled for males than females. Ghandour et al. (2019) also found that behavior and conduct disorders were higher among males than females. When it comes to substance use, however, female adolescents are disproportionately affected (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2024b). This is not surprising, however, considering that the research shows that adolescent females struggle more with poor mental health, and poor mental health is a risk factor for substance use. It is important to note, however, that these findings are inconsistent with reports from the National Institute on Drug Abuse (NIDA). While the NIDA also states that female adolescents from ages 12-20 have higher rates of alcohol misuse and binge drinking, they report that males are more likely to use illicit drugs (National Institute on Drug Abuse, 2020). They also affirm that there is no gender disparity among those who will develop a substance use disorder (National Institute on Drug Abuse, 2020).

LGBTQ+

The YBRS defines LGBTQ+ as individuals "who identify as lesbian, gay, bisexual, transgender, questioning, or another non-heterosexual identity" (Centers for Disease Control and Prevention, 2024b, p. 1). LGBTQ+ students were disproportionately affected across several factors of the YRBS. Compared to cisgender and heterosexual students, LGBTQ+ students were more likely to experience persistent feelings of sadness or hopelessness, experience poor mental health, seriously consider attempting suicide, make a suicide plan, and attempt suicide (Centers for Disease Control and Prevention, 2024b). The U.S. Department of Health and Human Services (2024) also reported disparities in suicide and suicide attempts among the LGBTQ+ population. LGBTQ+ individuals were also more likely to use alcohol, marijuana, and illicit drugs and misuse prescription opioids (Centers for Disease Control and Prevention, 2024b),

reinforcing that, similar to the female disparities, poor mental health and substance use are linked.

Socioeconomic Status

Individuals living below the poverty line have an increased likelihood of experiencing poor mental health (Bitsko et al., 2022; Centers for Disease Control and Prevention, 2023b). Disparities in childhood rates of ADHD, behavior/conduct problems, and depression were found for those living with the lowest income levels (Bitsko et al., 2022). Reiss et al. (2019) found that individuals with a low socioeconomic status (SES) were two to three times more likely to have poor mental health. Negative life events and stressors are more prominent among those with low SES, which can be a contributing factor to the development of poor mental health (Reiss et al., 2019). Regarding substance use, the prevalence of substance use disorders among adolescents was similar across poverty levels (Bitsko et al., 2022).

Rural Residents

Living in a rural area can affect the likelihood of experiencing mental health problems. Children in rural areas have a higher prevalence of ADHD, behavior problems, depression, and anxiety (Bitsko et al., 2022). In addition, children in rural communities are more likely to have one or more adverse childhood experiences (ACEs), which are "stressful or traumatic events that occur during childhood and are strongly related to a wide range of health problems" (Health Resources and Services Administration Maternal and Child Health Bureau, 2022, Adverse Childhood Experiences section). Out of the nine ACEs that were examined through the National Survey of Children's Health by the Health Resources and Services Administration Maternal and Child Health Bureau (2022), the following seven were more likely among rural children than urban children: had a hard time covering the basics, like food or housing, on the family's income...parent/guardian divorced or separated...lived with anyone with an alcohol/drug problem...parent/guardian serviced time in jail...lived with anyone who was mentally ill, suicidal, or severely depressed...saw or heard parents slap, hit, kick, punch one another in the home...had a parent or guardian who died (Adverse Childhood Experiences section).

ACEs can impact mental health and are linked with mental health disorders (Gu et al., 2022). Bitsko et al. (2022) reported that substance use among adolescents was similar across geographic areas. However, it is important to note that ACEs are also associated with substance use and substance use disorders (Centers for Disease Control and Prevention, 2021a; Gu et al., 2022).

Individuals with Disabilities

Individuals with disabilities can be negatively affected by poor mental health. As discussed earlier, comorbidity is a concern among those who suffer from mental disorders or substance use disorders (Centers for Disease Control and Prevention, 2023b; Cho et al., 2007; Khan et al., 2023; Winstanley et al., 2012). Ghandour et al. (2019) found that comorbidity was most common among individuals with depression. Aside from mental health and substance use disorders, individuals with disabilities (i.e. any physical or mental impairment) in general face disparities. Individuals with disabilities are more likely to experience frequent mental distress, suicide attempts, and suicide (Centers for Disease Control and Prevention, 2023d; U.S. Department of Health and Human Services, 2024). The Centers for Disease Control and Prevention (2023d) state that "adults with disabilities report frequent mental distress almost 5 times as often as adults without disabilities" (Many Adults with Disabilities Report Frequent Mental Health Distress section).

Treatment for Mental Health and Substance Use

Although the prevalence of poor mental health and substance use among our youth is alarming, there are treatments available to assist in removing some of the barriers that pose a hindrance to leading successful, productive lives. The negative outcomes of youth who suffer from poor mental health and/or substance are more likely to occur if they do not seek treatment (Sanchez et al., 2018). The Centers for Disease Control and Prevention (2023b) states that receiving early diagnosis and treatment makes a difference for children with mental disorders. They also state that treatment can help reduce symptoms, improve problems at home, at school, and in relationships, and help children develop into adulthood (The Centers for Disease Control and Prevention, 2024c). For substance use, screenings have been found to be an effective tool for getting students the treatment they need (Winstanley et al., 2012).

Although there is support for treatment, approximately half of the children with a diagnosis do not receive treatment (Health Resources and Services Administration Maternal and Child Health Bureau, 2020; Sanchez et al., 2018; Whitney and Peterson 2019). One study found that 78% of children with depression, 59% of children with anxiety, and 55% with behavior/conduct disorders received mental health treatment within the previous year (Centers for Disease Control and Prevention, 2023b; Ghandour et al., 2019). While that study focused on ages 3-17, Merikangas et al. (2011) looked at adolescents with a mental health and/or substance disorder, ages 13-18, who received treatment over their lifetime. The researchers found that only 36% of adolescents received treatment overall. The highest group to receive treatment were those diagnosed with ADHD (60%), followed by oppositional defiant disorder/conduct disorder (45%), mood disorder (38%), anxiety (18%), substance use disorder (15%), and eating disorder (13%) (Merikangas et al., 2011). Children with comorbid disorders were more likely to get

services, and the more disorders a child had, the more likely they would get treatment (Merikangas et al., 2011). Ghandour et al. (2019) found that disorders that were specifically comorbid with depression were most likely to get treatment. In addition, the researchers also found that the more severe a disorder, the more likely the child was to get treatment (Ghandour et al., 2019). As children become adolescents, they are also more likely to get treatment (Bitsko et al., 2022; Zablotsky & Terlizzi, 2020).

Disparities in Receiving Treatment

Just like there are disparities in mental health and substance use, there are disparities in who receives treatment. It is important to consider these disparities so they can be addressed, leading to more children having access to the assistance they need to improve their mental health and have successful outcomes. Overall, children from racial or ethnic minorities are less likely to receive treatment than White children. Lu (2017), Zablostky and Terilizzi (2020), and Zimmerman (2005) found that Black and Hispanic children were less likely to receive treatment than White children, while Merikangas et al. (2011) found that White children have a higher rate of receiving treatment than racial or ethnic minorities for several disorder types. Bitsko et al. (2022) reported that White children are the most likely to utilize services while Asian children are the lowest. Gender disparities may also exist among those who receive treatment, however, there are inconsistencies in the data. Lipari et al. (2016) and Zimmerman (2005) found that female adolescents were more likely to receive treatment than males. However, Zablotsky and Terilizzi (2020) found that boys, ages 5-17, were more likely to receive treatment than girls. Merikangas et al. (2011) found that female adolescents were more likely to receive services for anxiety, while males were more likely to receive services for ADHD. Data on socioeconomic status is not clear, either. Ghandour et al. (2019) and the Centers for Disease Control and

Prevention (2023b) found that children from low-income households were less likely to receive treatment, while Bitsko et al. (2022) found that there were no consistent patterns in who received treatment when looking at income. Furthermore, while Bitsko et al. (2022) found that there were no disparities among mental health consults when looking at urban versus rural areas, they did find that more children from rural areas received medication for mental health, suggesting that medication may be pursued more than behavioral treatment in rural areas.

Barriers to Receiving Treatment

One of the major issues our society faces with mental health is the barriers that prevent those in need from receiving services. Access to services, knowledge about services, and beliefs about treatment are three different barriers that contribute to certain individuals not obtaining treatment when in need. Availability and shortages of mental health services, costly and complex insurance procedures, lack of time due to work, family, and childcare needs, inflexible meeting times, lack of transportation and distance from services, and delays between the referral and appointment prove difficult for many to access mental health treatment (Anderson et al., 2017; Johansson et al., 2019; Waid & Kelly, 2020). Many people also do not have the mental health literacy needed to access services (Lu, 2017). This includes not being aware of available supports, lack of awareness of disorders and inability to recognize symptoms, lack of awareness or confidence in how to access services, and having difficulty navigating the mental health systems that are in place (Anderson et al., 2017; Stuckey et al., 2021; Waid & Kelly, 2020). Finally, personal beliefs about mental health and treatment can prevent individuals from receiving treatment. Many individuals face stigma or shame about being diagnosed with a mental health disorder or an overall negative attitude toward mental health (Lu, 2017; Waid & Kelly, 2020). Others are worried about confidentiality, lack of anonymity, or don't have trust in

mental health providers (Lu, 2017; Stuckey et al., 2021; Waid & Kelly, 2020). Some individuals also prefer to be self-reliant, preferring to try to deal with mental health on their own instead of reaching out for help (Waid & Kelly, 2020).

Many people in rural communities are susceptible to barriers to treatment. Children in rural areas are more prone to risk factors for poor mental health as well as barriers to mental health services (Bitsko et al., 2020). Rural communities face increased poverty rates, geographic isolation, transportation difficulties, distance to mental health providers, and shortages of services, all of which impact their access to services (Anderson et al., 2017; Centers for Disease and Control Prevention, 2024a;). In addition, individuals from rural communities are often more affected by the stigma associated with mental health disorders, the concern of anonymity if they participate in services, and an overall lack of family engagement that is more prominent in rural communities (Svistova et al., 2022; Waid & Kelly, 2020). Although telehealth has been proposed as a possible solution to some of these barriers, individuals in rural communities face the additional barrier of having poor technology and internet services to allow them to access services in this fashion (Svistova et al., 2022).

School Involvement with Mental Health

One way to address children's mental health needs and access to services is through the education system. While some may question why schools should be tasked with supporting mental health, there is plenty of evidence to support why schools are such an integral part of a child's mental health journey. The ultimate goal of our education system is to create productive members of society. As discussed earlier, poor mental health has an effect on several life outcomes, including academic success. Schools' involvement in the mental health of our children can help address the mental health needs of our youth.

A major reason schools play a role in the mental health of our youth is due to the significant amount of time they spend in the school setting (U.S. Department of Health and Human Services, 2024). The Substance Abuse and Mental Health Services Administration (SAMHSA) indicated that schools are "the most universal, natural setting" to provide support for our students who face difficulty with mental health or substance abuse issues (Vincent et al., 2019, Background section). In grades 9-12 alone, schools service more than 50 million students a day (Centers for Disease Control and Prevention, 2023c). Schools play an even larger role in areas where there is a lack of access to services, such as rural schools (Centers for Disease Control and Prevention, 2019; Svistova et al., 2022). Furthermore, many parents support the involvement of schools in mental health (Svistova et al., 2022).

In addition to the sheer amount of time that students spend in school, schools are also a place that can recognize behaviors of concern that may indicate mental health needs. Problematic behaviors are often first recognized in a school setting where students have to follow specific procedures and expectations (Olivier et al., 2020). In fact, most mental health and substance use referrals come from schools, and youth are often connected to treatment due to school-related difficulties (Vincent et al., 2019). Students with substance abuse issues can rarely recognize that they need treatment on their own, so schools serve an important role in making that connection (Wagner et al., 2004).

If a school utilizes a referral system for mental health needs, it is more likely for students to get connected to needed services (Centers for Disease Control and Prevention, 2023c). Linking students to services has a positive effect on mental health outcomes, including substance use (Hoots et al., 2023). SAMHSA states that "school-based student assistance provides a prominent and effective means to address substance use and mental health concerns through prevention and intervention supports" (Vincent et al., 2019, Background section). In addition, the National Strategy for Suicide Prevention supports a comprehensive approach to suicide prevention including utilizing schools, as they can be a vehicle to improve access to treatment and provide resources and information, especially for marginalized communities (U.S. Department of Health and Human Services, 2024).

Student Assistance Programs

Student Assistance Programs (SAPs) are one way that schools can address mental health and substance use needs. SAPs evolved from Employer Assistance Programs (EAPs) and were first introduced to address substance use issues in adolescents in the 1970s (McGovern & DuPont, 1991; Moore & Forster, 1993; Swisher et al., 1993; Vincent et al., 2019). EAPs were created to assist employees by addressing issues that hindered productivity in the workplace by linking employees to community supports while also providing support within the workplace (McGovern & DuPont, 1991; Moore & Forster, 1993). Likewise, just as EAPs have grown from a focus on substance use to broader issues, including mental health, SAPs have progressed to encompass any barriers to success, including mental health needs (Vincent et al., 2019).

SAMHSA defines SAP as:

a comprehensive, school-based framework, designed to provide a variety of services, including (1) education, (2) prevention, (3) early identification, (4) evidence-based intervention, (5) referral processes, and (6) guided support services for students in kindergarten through grade 12 who are exhibiting a range of risk factors that interfere with their educational success (Vincent et al., 2019, What is a Student Assistance Program section).

SAPs are the most popular school-based intervention in the U.S. to address substance use (Wagner et al., 2004), and more than 9,000 SAPs exist in the nation (Kanu et al., 2015). SAPs are run by trained personnel who address potential barriers to students' academic success, including (but not limited to): attendance issues, signs of anxiety or depression, self-harm/injury, abuse/neglect, substance use, family difficulties, and negative social relationships (Vincent et al., 2019). The goal is to link students to supports so barriers can be removed or reduced, and students can improve their academic success (Vincent et al., 2019).

Although SAPs run differently depending on state or district guidelines, there are components that are similar across all SAPs. SAMHSA published a document titled "Student Assistance: A Guide for School Administrators" that provides information and guidelines for implementing SAPs (Vincent et al., 2019). The following summarizes this information. First, a SAP team consists of trained school staff across several disciplines, such as teachers, counselors, or nurses, as well as community specialists in mental health and substance use fields. A referral process is used to identify vulnerable students to the SAP team. Referrals can be made by faculty, staff, families, peers, community members, or the students themselves. SAP team members then meet with the student to assess the concerns and risks and work with the student and family members to identify the specific barriers to the student's learning and success. SAP team members, the student, and the family work together to come up with a plan to connect the student to appropriate services that will help reduce or remove the barriers that were identified (Vincent et al., 2019).

There are three different models for SAP teams: internal, external, or core team (Swisher et al., 1993; Vincent et al., 2019). With internal models, the SAP team members are employed by the school district (Swisher et al., 1993; Vincent et al., 2019). With external models, the SAP

team members have a contract with the district to provide services (Swisher et al., 1993; Vincent et al., 2019). With the core team model, school employees are used to make up the SAP team (McGovern & DuPont, 1991; Swisher et al., 1993; Vincent et al., 2019). McGovern and DuPont (1991) used the term "counselor" model, which combined the internal and external model into one category. There are advantages and disadvantages to each model type. School districts should take into account how much ownership of the program they want to provide, and how much time and finances are available to support the program. Core team models provide the most school ownership, with interdisciplinary staff members, use of a systems approach, and continuity and availability of team members, but rely on the district providing both time and finances for the program to be effective (Vincent et al., 2019). Internal models are more costeffective and allow for the expertise of mental health and substance use professionals, but do not always provide continuity due to staff turnover, have restrictions on confidentiality, and do not allow as much input from the school (Vincent et al., 2019). External models are the most separated from the school, which decreases any liability of the school, but it also does not allow for schools to have decision-making ability with the program, has increased confidentiality regulations, and does not provide the continuity that is present in a core team model (Vincent et al., 2019).

Research has shown several different components that are evident in successful programs. First, successful programs should have a clear framework with written policies that are followed with fidelity, including a formal referral process (Kanu et al., 2015; Moore & Forster, 1993; Vincent et al., 2019, Wanger et al., 2004). It is also important that proper training is in place. Not only should SAP team members receive specific training, but all school staff should be trained on the SAP process, how to recognize at-risk behaviors, and how to make a

referral to the SAP team (Kanu et al., 2015, Moore & Forster, 1993; Vincent et al., 2019; Wagner et al., 2004). In addition, there should be a focus on program awareness so that students, families, community members, and other stakeholders are aware of the program and how to make a referral (Kanu et al., 2015; Vincent et al., 2019). It is crucial to have the support of the community and other stakeholders for a successful program, and community collaboration is key for SAPs to work (Kanu et al., 2015, Moore & Forster, 1993; Vincent et al., 2019; Wagner et al., 2004). Furthermore, the SAP program should be making linkages to community, family, or other school programs and services (Kanu et al., 2015; Vincent et al., 2019). Specialists from the community (mental health and/or drug and alcohol) should be completing student assessments and assisting with these linkages (Moore & Forster, 1993). A final essential component of a successful SAP is ongoing evaluation. Student data should be collected to ensure the success of the proposed services (Moore & Forster, 1993), and individual SAPs should be frequently monitored for individual successes and needs (Kanu et al., 2015; Vincent et al., 2019; Wagner et al. 2004).

SAPs continue to grow in the U.S. due to the positive impact they have on helping improve emotional, behavioral, and academic functioning among students (Vincent et al., 2019). Social, emotional, and behavioral functioning directly impacts academic outcomes, and SAPs can assist with improving family and school connections, skill-building, self-management, relationship skills, decision-making skills, organization skills, and other academic needs (Vincent et al., 2019). SAPs work with existing services by linking students to these supports, which in turn helps strengthen these services as well as the overall school curricula (Vincent et al., 2019). Several positive outcomes have been reported with the use of SAPs in schools, including improved behavior, attendance, assignment completion, grades and academic achievement, grade promotion and graduation rates, self-control, self-efficacy, social competence, school attitudes, classroom performance, and staff morale (Kanu et al., 2015; Vincent et al., 2019). SAPs also help decrease disruptive behaviors, alcohol and drug use, discipline referrals and suspensions, drinking and driving, bullying, vandalism, and school dropout rates (Kanu et al., 2015; Vincent et al., 2019, Winstanley et al., 2012).

The Centers for Disease Control and Prevention (2023c) created a school-based program to address student health needs, including mental health, called *What Works in Schools*. This program recommends establishing a referral system that links students to providers as well as forming partnerships with community organizations (Centers for Disease Control and Prevention, 2023c), which is the essence of SAPs. SAPs can serve as a way to help students and families get linked to supports that they may otherwise find difficult to navigate on their own (Anderson et al., 2017). SAPs also allow for self-referrals, which give students a way to access services in a way they might not otherwise know how (Anderson et al., 2017) and convey an overall message to students that help and support are available to them (Vincent et al., 2019). Additionally, Bitsko et al. (2022) also stated that policies and programs provided during childhood improve the long-term well-being of an individual's health and function, supporting the use of SAPs in schools.

SAPs in Pennsylvania

Background

Pennsylvania has its own network of student assistance programs. The Pennsylvania Network for Student Assistance Services (PNSAS) defines Pennsylvania SAP as: a team process used to mobilize school resources to remove barriers to learning. SAP is designed to identify academic, social, attendance, substance use, mental health, and other concerns which pose a barrier to student success. The primary goal of the Student Assistance Program is to help students overcome these barriers so that they may achieve, advance, and remain in school (Pennsylvania Network for Student Assistance Services, n.d.-b, What is SAP? section).

PNSAS oversees all SAPs in Pennsylvania (Commonwealth of Pennsylvania, n.d.-b). The first PA SAP was established in 1984 when the PA Department of Drug and Alcohol Programs (DDAP) provided a grant to pilot the program throughout the state in collaboration with the Pennsylvania Department of Education (PDE); at this time, the focus of SAP was on alcohol, tobacco, and other drug use in adolescents (Commonwealth SAP Interagency Committee, 2004b; Pennsylvania Network for Student Assistance Services, 2018). The success of the program led to further funding and expansions (Commonwealth SAP Interagency Committee, 2004b). Two years later, the Office of Mental Health and Substance Abuse Services (OMHSAS), part of the PA Department of Human Services (DHS), provided funding to incorporate strategies for students at risk of suicide into the SAP program (Commonwealth SAP Interagency Committee, 2004b; Pennsylvania Network for Student Assistance Services, 2018). Then, in 1988, pilots for elementary school SAPs began (Commonwealth SAP Interagency Committee 2004a; Pennsylvania Network for Student Assistance Services, 2018), and the Commonwealth SAP Interagency Committee was formed (Pennsylvania Network for Student Assistance Services, 2018). The Commonwealth SAP Interagency Committee is comprised of representatives from the PDE Office for Safe Schools, the PA DDAP Bureau of Treatment, Prevention and Intervention, and the PA DHS Bureau of Children's Behavioral Health Services OMHSAS

(Commonwealth of Pennsylvania, n.d.-b; Pennsylvania Network for Student Assistance Services, n.d.-c). The interagency collaborates to oversee PNSAS, increase funding, meet programming needs, improve training, and address policy and procedural issues (Commonwealth SAP Interagency Committee, 2004b; Pennsylvania Network for Student Assistance Services, 2021; Pennsylvania Network for Student Assistance Services 2024b).

SAPs are also a state requirement by PA Public School Code law (Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2023; Commonwealth SAP Interagency Committee, 2004b). Act 211 of 1990, otherwise known as Section 1547 of the PA Public School Code, requires all public-school entities to have a K-12 program in which students receive appropriate counseling and support related to substance use (Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2023; Commonwealth SAP Interagency Committee, 2004b). In 1991, the Secretary of PDE appointed the SAP program to fulfill the requirement to identify students at risk for substance use or mental health issues and refer them to appropriate services (Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2023; Commonwealth SAP Interagency Committee, 2004b). Section 12.42 of the PA Public School Code was amended in 2005 to create specific provisions for SAP planning and provision for all school entities (Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2023). One federal law that is exceptionally pertinent to SAPs is the Protection of Pupil Rights Amendment (PPRA) (Pennsylvania Network for Student Assistance Services, 2023). This law requires schools to obtain written parent permission prior to a student participating in any type of survey, analysis, or evaluation with specific question types, such as questions about mental or

psychological problems, sex behavior or attitudes, and illegal, anti-social, self-incriminating, or demeaning behavior (Pennsylvania Network for Student Assistance Services, 2023). Due to this law, SAPs are required to get written permission from parents for specific portions of the SAP process.

Structure and Process

Pennsylvania SAPs follow a specific structure and process. All SAP team members must be trained under a specific program provided by a PA Approved SAP Training Provider (PASTP) (Pennsylvania Network for Student Assistance Services, 2021; Pennsylvania Network for Student Assistance Services, 2022). SAP teams should include at least four school staff members but should be based on the caseload of each SAP team (Pennsylvania Network for Student Assistance Services, 2022). Like national SAP teams that follow the core model, the team should be multidisciplinary and include members such as teachers, administrators, counselors, nurses, psychologists, social workers, or other staff members (Pennsylvania Network for Student Assistance Services, 2022). While PA SAPs follow the core team model, they incorporate a part of the internal model by contracting both mental health and drug and alcohol liaisons from county agencies (county Mental Health and Developmental Services and county drug and alcohol offices, also known as Single County Authorities) (Pennsylvania Network for Student Assistance Services, 2022). PNSAS also has Regional Coordinators that provide support to the county agencies, liaisons, and SAP teams (Pennsylvania Network for Student Assistance Services, 2024b). There are nine regions within PA, each of which has its own PNSAS Regional Coordinator (Pennsylvania Network for Student Assistance Services, n.d.-c). Finally, the most important members of SAP, are the student and their families. PA SAP supports a strengthsbased approach that focuses on the child and includes the family throughout the SAP process

(Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2024b). Over the years, PA SAPs have collaborated with partners, including Pennsylvania Association of Student Assistance Professionals (PASAP), Pennsylvania Positive Behavior Support (PAPBS), Prevent Suicide PA (PSPA), Pennsylvania Commission on Crime and Delinquency (PCCD), and PA Parent and Family Alliance, to strengthen the program and services that are provided to children and families (Pennsylvania Network for Student Assistance Services, n.d.-e).

PA SAP teams have four distinct phases that are followed for each SAP referral it receives (Pennsylvania Network for Student Assistance Services, 2024a). The first phase is the referral phase. A referral for a student to the SAP team can be made by anyone, including school staff, parents, peers, community members, or self (Pennsylvania Network for Student Assistance Services, 2022). It is crucial that all of these stakeholders are made aware of the SAP team, its process, and how to make a referral in order for the SAP team to be successful; PNSAS recommends that information regarding SAP is presented at least annually to the aforementioned groups (Pennsylvania Network for Student Assistance Services, 2022). Referrals to the program can be made using paper or electronic referral forms and should contain observable behaviors of concern (Pennsylvania Network for Student Assistance Services, 2024a). Once the referral is received, the SAP team discusses the referral and assigns a case manager, a member of the SAP team (Pennsylvania Network for Student Assistance Services, 2024a).

The second phase of the SAP process is to collect data on the student. Behavior checklists are sent to staff who interact with the student and can include teachers, administrators, nurses, counselors, coaches, etc. (Pennsylvania Network for Student Assistance Services, 2024a). Additional data that is collected can include grades, attendance records, discipline records, nurse visits, or other relevant data. Once the data is collected, the case manager contacts the parent/guardian of the student to explain SAP, build rapport, and gather further information (Pennsylvania Network for Student Assistance Services, 2024a). At this time, the SAP team must receive written permission to proceed with the SAP process, due to PPRA (Pennsylvania Network for Student Assistance Services, 2024a). Once that permission is obtained, members of the SAP team will meet with the student to explain SAP and gather information from the student (Pennsylvania Network for Student Assistance Services, 2024a). The data received from school staff, parents, and students is then reviewed and summarized by the SAP team (Pennsylvania Network for Student Assistance Services, 2024a).

Phase three of SAP process is the action planning phase (Pennsylvania Network for Student Assistance Services, 2024a). Once the data has been reviewed and summarized, members of the SAP team meet with the student and the student's family to collectively make a plan that best meets the student's needs (Pennsylvania Network for Student Assistance Services, 2024a). It is important to note that SAP teams do not diagnose, treat, or refer to treatment (Pennsylvania Network for Student Assistance Services, 2024b). However, the team can conclude that a screening or assessment can be done by the mental health and/or drug and alcohol liaison on the SAP team, and the liaisons can make recommendations based on the results of the screenings/assessments (Pennsylvania Network for Student Assistance Services, 2024b). Due to PPRA, written parent permission must be obtained prior to any screenings or assessments completed by the liaisons, despite the parent already giving permission earlier in the process (Pennsylvania Network for Student Assistance Services, 2024a). The action plan decided by the team should be data-driven and measurable with goals, steps, timelines, and a way to measure progress (Pennsylvania Network for Student Assistance Services, 2024a). Action plans can include school and/or community services. School services include academic supports, school-team supports, one-to-one counseling with school counselor or school psychologist, group intervention, school social work services, one-to-one follow-up with SAP team member or other school personnel, alternative school placement, crisis intervention, or other school supports (Pennsylvania Department of Education, n.d.-a; Pennsylvania Network for Student Assistance Services, 2022). Community services include screenings by liaisons, continuation of treatment services (if student is already involved in drug and alcohol or mental health treatment), natural community supports, Children and Youth services, or other community supports (Pennsylvania Department of Education, n.d.-a).

The final phase of the SAP process is follow-up (Pennsylvania Network for Student Assistance Services, 2024a). The case manager should continue ongoing communication to ensure that the action plan is being followed and that the recommended services are successful (Pennsylvania Network for Student Assistance Services, 2024a). Data should continue to be collected to see if the plan is working or needs to be adjusted (Pennsylvania Network for Student Assistance Services, 2024a). Cases are closed when services are in place and progress is being made toward the goals of the action plan; some cases may be closed at the end of the school year. (Pennsylvania Network for Student Assistance Services, 2024a). Data for each referral is collected on a SAP state reporting form called the PDE 4092 (Pennsylvania Network for Student Assistance Services, 2021; Pennsylvania Network for Student Assistance Services, 2024a). The data collected on these forms is non-identifiable as a case number is used and no other identifiable information is collected on the form (Pennsylvania Network for Student Assistance Services, 2021). This data is entered into the Student Assistance Program (SAP) District Reporting Site, an online reporting system, via the Pennsylvania Safe Schools Online Application at <u>https://www.safeschools.pa.gov/SAP/Landing.aspx</u> (Pennsylvania Network for Student Assistance Services, 2021). Each district must input data from its PDE 4092 forms no later than June 30 of every year (Pennsylvania Network for Student Assistance Services, 2021).

Research on PA SAPs

As noted by Sekhar et al. (2023), PDE retains all records collected from districts' PDE 4092 forms. However, despite collecting the data, research for this literature review found there has been limited analysis of the data to look at trends, relationships, disparities, or other research inquiries. This is commensurate with the findings of researchers Sekhar et al. (2023). PNSAS does provide yearly summaries of the data that is collected on their SAP Data website at https://pnsas.org/Data, and the following information is from the infographic provided on the site (Pennsylvania Network for Student Assistance Services, n.d.-d). For the 2022-2023 school year, a total of 100,435 referrals were made to SAP teams across the state, of which 32% were for elementary students and 68% were for secondary students. The grade with the highest level of referrals was 9th, followed by 10th, and then 8th. Externalizing behaviors, internalizing behaviors, and family concern were the top three reasons for referral. Referrals were mostly made by instructional staff, followed by non-instructional staff, disciplinarians, and parent/guardians. The most recommended school services were one-to-one counseling with school counselor and/or school psychologist, one-to-one follow-up with team member or school personnel, and group intervention. The most recommended community services were screenings by liaisons.

Information regarding liaison activity is also provided in an infographic on the PNSAS SAP Data website (Pennsylvania Network for Student Assistance Services, n.d.-a). The following information was presented for the 2022-2023 school year on the infographic (Pennsylvania Network for Student Assistance Services, n.d.-a). A total of 32,805 screenings and assessments were completed by SAP liaisons. The majority, 72%, of the screenings and assessments were completed for White students, 13% for Black/African American, 8% for Hispanic, and 8% for other; 51% of the screenings and assessments were for males and 48% were for females (1% was other gender) and 48% were for students that were 14 years or older, while 29% were for students ages 11-13 and 23% were for students age 10 or younger. A total of 22,451 students were screened or assessed for suicide ideation. The following services were recommended after a screening, from most to least: mental health assessment, community-based support services, in-school support services, liaison support services, drug and alcohol assessment, crisis intervention services, other recommendations, co-occurring assessment, and medical services. Service recommendations after drug and alcohol assessments, from most to least, were drug and alcohol outpatient, drug and alcohol early intervention, drug and alcohol intensive outpatient, and other treatment; service recommendations for mental health referrals, from most to least, were psychiatric outpatient, intensive behavioral health services, familybased mental health services, psychiatric partial hospitalization, and psychiatric inpatient/residential. Services that were not treatment that were recommended after assessments included liaison support services, school supports, community-based services, crisis intervention services, and other assessment (Pennsylvania Network for Student Assistance Services, n.d.-a).

While PNSAS provides a great summary of the data collection, researchers Sekhar et al. (2023) formed a collaboration between the Penn State College of Medicine and PNSAS to address the need for data analysis. Their analysis of the PDE 4092 forms were from the years 2013-2018. Of all the referrals made during that time, 55% were male and 45% were female; 69% were White, 16% were Black/African American, 10% were Hispanic, 4% were multi-racial, 1% were Asian, and less than 1% were American Indian/Alaskan Native or Native

Hawaiian/other Pacific Islander. The majority of referrals were for high school, grades 9-12, at 50%, followed by middle school, grades 6-8, at 30%, and elementary school, PK-5, at 20%. The majority of referrals occurred during the months of September and October, with around 18% of all referrals occurring in each, followed by November, which received 12% of the referrals, and then February and March which each had around 10% of the referrals. The top three incoming referral sources were the same as the PNSAS summary data from the 2022-23 school year: instructional staff, noninstructional staff, and disciplinarians; the fourth highest referral source was approximately 8% for both administrators and parents/guardians. The primary referral reasons were behavioral, academic, and family concerns (note: the PDE 4092 was revised since the 2017-2018 school year to distinguish between internal and external behavior concerns). Written parent/guardian permission to continue with the SAP process was obtained for 68% of all cases. The top three recommended school services were one-to-one counseling with a school mental health professional, one-to-one follow-up with a team member/school personnel, and inschool support groups, while the top three recommended community services were screening by a mental health liaison, none, and combined mental health/drug and alcohol screening. The top three services recommended after a screening were mental health assessment, one-to-one with a mental health liaison, and a combined mental health and drug and alcohol assessment (Sekhar et al., 2023).

In addition, many trends were found in Sekhar et al.'s (2023) analysis. The number of referrals to SAP increased by 24% from the 2012-2014 school year to the 2017-2018 school year; Sekhar et al. also noted that school enrollment declined during this period. High school students had the highest number of referrals across the five years; however, elementary referrals did increase over time. Academic concerns were highest among elementary students, while there

were more drug and alcohol related concerns for high school students. Self-harm and suicidal ideation were highest among middle school students. Some disparities were also found among the data. Written permission from parents/guardians was more likely to be obtained for female students, and Hispanic students were the least likely to obtain written permission. When also looking at school enrollment rates, males were more likely to be referred to SAP; there were no disparities found among race and ethnicity (Sekhar et al., 2023).

Another collaboration between Penn State College of Medicine and PNSAS looked at PA SAP policies and procedures (Sekhar et al., 2024). Researchers Sekhar et al. (2024) found that the median number of SAP team members was eight and typically included a school counselor, teacher, and/or principal/vice principal. Most teams met once a week. Annual team maintenance (defined as "activities and processes designed to support collaborative working relationships, effective team functioning, and personal wellness among members within the SAP team"; Pennsylvania Network for Student Assistance Programs, 2021, question 15 under Best Practice Guidelines section) took place for 38% of SAP teams. As SAP teams grew larger, it was more likely for SAP teams to participate in team maintenance as well as have regular team meetings. SAP teams noted their training needs as mental health issues, trauma, and parent engagement strategies. Regarding community outreach of the SAP program, 81% of SAP teams inform parents/families about the SAP process annually, and 66% inform students about the SAP process annually. Only 12% of teams utilize a parent satisfaction survey (Sekhar et al, 2024).

In the past, there have been attempts to evaluate PA SAPs. In 1998, the Pennsylvania Commission on Crime and Delinquency funded the first initiative to evaluate PA SAPs (Commonwealth SAP Interagency Committee, 2004b; Fertman et al., 2003). The first year of this study looked at the SAP referral process, parent consent practices, intervention services, contract provider assessments, school-based probation officers' SAP involvement, and SAP improvement and satisfaction (Commonwealth SAP Interagency Committee, 2004b; Fertman et al., 2003). The results from the first-year study concluded that there were successful referral processes in place, contact was being made to parents to involve them in the process, a variety of services were recommended, liaison services were in place, an increasing number of school-based probation officers were being utilized as a SAP resource, and that (although not largely used) parent and student satisfaction surveys may contribute to the quality of SAP (Fertman et al., 2003).

A continuation of the study included a literature review (including the results of the firstyear study) to identify essential SAP components, indicators of effective SAPs, common units of analysis to link data sources, user-friendly materials, and training modules (Fertman et al., 2003). This evaluation led to the creation of a SAP handbook titled "Pennsylvania SAP Components and Indicators Handbook" (Commonwealth SAP Interagency Committee, 2004b; Fertman et al., 2000). Nine evidence-based components that are highlighted by Fertman et al. (2000) in this handbook are: policy and procedures, communications, referral mechanisms, parent participation, team planning, intervention and recommendations, follow-up and support, training, and outcome indicators and evaluation (Commonwealth SAP Interagency Committee, 2004b; Fertman et al., 2000). Within policy and procedures, Fertman and et al. (2000) concluded that building administrators should be involved and support SAP, liaisons should work with the SAP team, there should be a SAP coordinator for each building, there should be policy violations and consequences for alcohol, drugs, tobacco, and weapons, and there should be a clear SAP structure and organization. For communications, there should be a description of SAP services, in-services for staff, and specific student and parent communication strategies. The third

component, referral mechanisms, indicates that SAP should be accessible to all students, there should be formal referral procedures and decision-making processes, screening processes should include clear and consistent data collection and procedures, and there should be clear confidentiality guidelines. The parent participation component suggests a formal parent involvement procedure. Team planning should include having a regular meeting time sufficient to complete SAP work and having clear roles and responsibilities for team members. For intervention and recommendations, it is important for teams to support and provide linkages for students and parents to access school and community services. Similarly, it is important to promote access to and encourage compliance with school and community recommendations, while also making sure school resources are available and accessible for the follow-up and support component. Training indicators include that all team members participate in approved training, teams participate in maintenance, and teams have adequate training schedules and budgets. Finally, for outcome indicators and evaluation, SAP monitoring and improvement mechanisms should be in place (Fertman et al., 2000).

Based on those two studies, Fertman et al. completed another study in 2003. This study looked at secondary (grades 6-12) PA SAP referrals from the years 1998-2001 (Fertman et al., 2003). Researchers found that more females were referred than males, 18% of all referrals were for students in special education, and 9th grade had the highest number of referrals. The researchers also found that there was a steady increase in referrals from 1995 to 2001, with a 7.4% referral rate (found by utilizing enrollment rates) in the school year 1995-1996 and a 16.3% referral rate in 2000-2001. An average of 87% of referred students were recommended to school services, with the majority of students (93%) accessing those services, while 52% of referrals had community service recommendations, with 82% of students accessing those services. A

total of 62% of referrals led to liaison assessments, with 9% for drug and alcohol, 41% for mental health, and 12% for both drug and alcohol and mental health. In addition, 19% of referrals resulted in referrals to Children, Youth, and Family services (Fertman et al., 2003).

Despite the limited analysis of data over the past 40 years since the first PA SAP teams were introduced, the research discussed shows that SAPs play an important role in connecting students to needed school and community services. In addition, there is substantial support for these programs. In 1990, only six years after the conception of PA SAPs, the American Medical Association (AMA) National Congress on Adolescent Health's Award for Excellence in Intervention for Coordination of Adolescent Health Services within a State was granted to Pennsylvania's SAPs (Commonwealth SAP Interagency Committee, 2004b). Sekhar et al. (2024) states that PA SAPs serve as a model for other SAP programs. With SAPs in place in Pennsylvania, students are consistently linked to behavioral health services at higher rates than reported nationally, and the majority of students follow through with SAP team recommendations (Fertman et al., 2003). When students are referred to PA SAP teams, they have improved attendance, increased grade promotion and graduation rates, and decreased discipline issues (Fertman et al., 2003). Additionally, Biddle et al. (2014) found that students involved in PA SAP programs were likely to cease drug and alcohol policy violations as well as suspensions when the following services were recommended: placement in an alternative school, assessment by drug and alcohol liaison, children and youth services, counseling by faith organizations, one-to-one counseling by school personnel, assessment by a behavior specialist, crisis intervention services, drug and alcohol prevention groups, juvenile probation involvement, and crisis intervention with outpatient mental health treatment. SAP programs in PA have a

long-standing background and have helped many students get linked to the services they need. Continued analysis of the data can strengthen the support for this program.

Conceptual Frameworks

Although PA SAP has its own specific framework, it also meets the standards for other state and national frameworks, such as the Pennsylvania Child and Adolescent Service System Program (CASSP), the Pennsylvania Department of Public Welfare's "Guideline for Best Practice in Child and Adolescent Mental Health Services", and CDC's Whole School, Whole Community, Whole Child (WSCC). CASSP was developed around the same time that Pennsylvania initiated SAP programs; Congress allocated funds to CASSP as a comprehensive mental health system for children and their families (Commonwealth of Pennsylvania, n.d.-a). Pennsylvania received its first grant in 1985 and began an infrastructure for a comprehensive system of care that addresses children's behavioral health needs (Commonwealth of Pennsylvania, n.d.-a). CASSP provides the structure for children's behavior health in Pennsylvania and "ensures that services and treatment for children and adolescents with or at risk of serious emotional disorders are planned collaboratively with the family and all agencies involved in the child's or adolescents' life" (Commonwealth of Pennsylvania, n.d.-a, State and Local Partnerships section). CASSP has six core principles: child-centered, family-focused, community-based, multi-system, culturally competent, and least restrictive/least intrusive (Commonwealth of Pennsylvania, n.d.-a). PA SAP framework also has a strong focus on being child-centered, family-focused, and community-based. Both PA SAP and CASSP consider the child's family and community contexts, use a strength-based approach, ensure that parents participate in decision-making, and include community supports (Commonwealth of

Pennsylvania, n.d.-a; Pennsylvania Network for Student Assistance Services, 2018; Pennsylvania Network for Student Assistance Services, 2024b).

The Pennsylvania Department of Public Welfare created the "Guidelines for Best Practices in Child and Mental Health Services" to provide a framework that produces a high quality of care (Pennsylvania Department of Public Welfare, 2001). These guidelines are consistent with CASSP principles (Pennsylvania Department of Public Welfare, 2001). Although SAPs do not provide treatment themselves, they encounter mental health needs and work closely with the mental health sector, so it is beneficial to have similar frameworks. Within the guidelines, Pennsylvania Department of Public Welfare (2001) lists 12 characteristics of a positive public sector culture, many of which coincide with PA SAP's ideologies: clear values for systems of care, clear practice expectations, facilitative regulations, empowered families and advocates, with participation in policy development, preparation and dissemination of guidelines for best practice, emphasis on training and technical assistance, use of newsletters to communicate new ideas, share experiences, and celebrate success, presence in every county, decentralized structures for decision-making, cross-systems initiatives, using managed care and welfare as tools for positive systems change, and careers and prestige for public sector clinicians and workers (Pennsylvania Department of Public Welfare, 2001). First, PA SAP has clear values for system of care, as shown by their support to children and their families' needs, working with other programs and agencies, and following many of the CASSP principles. PA SAPs follow clear practice expectations by having specific frameworks, processes, phases, and guidelines. Facilitative regulations for SAP could include the PA School Code and federal laws that are followed as well as specific guidelines for SAP team members. PA SAP has a significant emphasis on including families in the SAP process. PASTP was developed to ensure all training

was cohesive, regional coordinators are available for technical assistance, and PNSAS has guidelines for best practices available on their SAP Teams website (https://pnsas.org/Teams). PA SAPs are required in each public school district grades K-12, so they have a presence in every county. Another key principle of PA SAPs is utilizing a team approach, so there are decentralized structures for decision-making. PA SAPs also utilize cross-systems initiatives as SAP teams work with liaisons, school programs, and community support systems. The framework for PA SAPs parallels the characteristics of a positive public sector culture in many ways. Additionally, the Pennsylvania Department of Public Welfare (2001) promotes a strengthbased approach, which is also key to the PA SAP process.

The WSCC model is a framework for addressing health in schools (Centers for Disease Control and Prevention, 2023a). Much like PA SAPs, the WSCC model emphasizes students and their families and the role of the community to help address barriers to academic achievement (Centers for Disease Control and Prevention, 2023a). The WSCC model also notes the importance of utilizing evidence-based practices (Centers for Disease Control and Prevention, 2023a), and PA SAPs support data-driven decision-making. Although the WSCC model has 10 different components, there are four components that align with PA SAP: social and emotional climate, counseling, psychological and social services, community involvement, and family engagement (Centers for Disease Control and Prevention, 2021b, Centers for Disease Control and Prevention, 2023a). SAPs can contribute to a positive social and emotional climate through the SAP referral process by giving the students an outlet to refer themselves or peers if they are struggling. Having a known presence of SAP teams in the school can also show that school staff are supportive of student needs and that they are able to get the assistance they need. Referrals to the SAP program can also increase student engagement and positive relationships. SAPs support the counseling, psychological, and social services component by identifying barriers and connecting students to services. Prevention and intervention of mental, behavioral, and social-emotional health can assist with reducing barriers to learning. SAPs also support community involvement as discussed throughout this review; SAPs gather and provide community resources to students as well as work with liaisons from community agencies. Both the WSCC model and SAP acknowledge the importance of engaging families to best meet the needs of the students and address barriers that the students face. Families are included in planning and decision-making throughout the SAP process.

Theoretical Framework

The Behavioral Model of Health Services Use (BMHSU) is a theoretical framework that closely coincides with the purpose of this study. The BMHSU framework looks at health services utilization, including why people use healthcare services, defining and measuring the multiple aspects of access to healthcare services, and the relationships between healthcare need, use, and supply (Andersen, 1995; Andersen, 2008; Andersen & Newman, 1973; McPake et al., 2020). The goal of the model is to promote equitable access to healthcare and can be used to both predict and explain health services use (Andersen, 1995). The model can be used as a means to identify barriers (or facilitators) so that changes can be made to improve access to health services so that necessary changes to the SAP process can be made to improve access to improve access to services for all students in need.

The BMHSU originated in the late 1960s by Ronald Andersen, who was a medical sociologist and health care services researcher (Alkhawaldeh et al., 2023; Andersen, 1995). Although changes were made to the model since then (in 1973, 1995, 2000, and 2001), which

made the model more detailed and intricate, the overall groundwork remained the same (Alkhawaldeh et al., 2023; Andersen, 2008). The model looks at both societal and individual factors that affect health services usage (Andersen & Newman, 1973). Societal factors refer to the health services systems, particularly the volume and distribution of health service resources and the access and structure of the health service organizations, while the individual factors look at predisposing, enabling, and need characteristics of individuals in need of services (Andersen & Newman, 1973).

The predisposing, enabling, and need characteristics are the most popular components that are referenced in regard to BMHSU. Predisposing characteristics include demographic traits, societal structure, and health beliefs (Alkhawaldeh et al., 2023; Andersen, 1995; Andersen & Newman, 1973). More specific examples include age, race, gender, education, marital status, and employment status (Alkhawaldeh et al., 2023). Enabling characteristics include personal, family, and community traits, such as income, availability of resources, access to services, medical insurance, geographical location, and distance to services (Alkhawaldeh et al., 2023; Andersen, 1995; Andersen & Newman, 1973). These are characteristics that assist (or deter) people in using healthcare services (Alkhawaldeh et al., 2023). Need characteristics include both perceived and actual (or evaluated) needs (Andersen, 1995; Andersen & Newman, 1973). Factors that may be included in this category are whether or not the illness is chronic, the type of illness, and the number of illnesses a person has (Alkhawaldeh et al., 2023).

The BMHSU is "the most frequently cited model of health service use" (Graham et al., 2017, p. 170) and "the most regularly used tool to identify factors associated with health services utilization" (Alkhawaldeh et al., 2023, p.1347). The model is also used throughout multiple countries and across a variety of health systems, including mental health (Alkhawaldeh et al.,

2023). Graham et al. (2017) utilized the model to analyze mental health service use among individuals with depression. Similarly, researchers Reinhold et al. (2021) have begun a longitudinal study regarding mental health service use among individuals with depression which also utilizes the BHMSU. Pilar et al. (2020) used the BMHSU to identify variables to predict if college students would access on-campus mental health services. Eijgermans et al. (2021) completed a systematic review of mental health service use among children and adolescents using the BMHSU to analyze the data. Finally, Xu et al. (2023a) and Xu et al. (2023b) used the model to in their studies to analyze mental health services among children in kinship care (Xu et al., 2023a) and among children receiving out-of-home care (Xu et al., 2023b).

Although researchers have noted some limitations to the BMHSU, such as a need for a more specific model for mental health, additional determinants, and additional research in the mental health field (Eijgermans et al. 2021; Graham et al., 2017; Pilar et al., 2020), they agree that the model serves as a starting point or guide to identify barriers to access. Additional research, specifically in the mental health field, can provide further insight on how Andersen's model can help analyze mental health service utilization. It is also important to note that this model can be flexible (Alkhawaldeh et al., 2023), so researchers have the ability to categorize variables into predisposing, enabling, or need factors. The data in this research concentrates specifically on predisposing characteristics; however, it is important to consider enabling and need characteristics when interpreting the results of this study.

Summary

Research shows that SAPs, specifically in Pennsylvania, are an integral part of meeting children's mental health needs. PA SAPs have a specific framework and guidelines that are consistent with other state and national frameworks for children's mental health. Mental health

affects students' academic achievement, relationships, overall well-being, and long-term outcomes. As research shows, there can be disparities among mental health diagnoses and treatment that is received. Limited research has been conducted to see if there are disparities, trends, or indicators for those who access services through the PA SAP program, despite annual collection of data on referral cases. Specifically, this study looks at the following research questions: (1) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, or incoming referral reason impact the probability of students receiving written parent permission to proceed with the SAP process? (2) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary school service recommended by SAP team impact the probability of students accessing recommended school services? (3) Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary community service recommended by SAP team impact the probability of students accessing recommended community services? This data can indicate possible weaknesses, as well as strengths, of the PA SAPs so that the needs of the programs can be addressed. The research supports PA SAPs' evidence-based approach and their accessibility to all students, which also coincides with Andersen's BMHSU theoretical framework.

Chapter 3: Methodology

Data Analysis

For this study, the researcher chose to utilize a binary logistic regression model. Binary logistic regression is often used in social sciences (Denham, 2016; SPSS Analysis, n.d.) to predict whether a dependent variable can be predicted from independent variables (Laerd Statistics, n.d.-a). A logistic regression predicts outcomes based on a set of variables; the term

binary refers to the dependent variable, which is dichotomous, meaning that there are only two possible outcomes for the variable (IBM, 2021a; SPSS Analysis, n.d.). In other words, a binary logistic regression estimates the probability of a dependent variable occurring based on the occurrence of one or more independent variables (Denham, 2016; SPSS Analysis, n.d.).

In this study, the dichotomous dependent variables are (1) parent permission obtained, (2) student accessed recommended school services, and (3) student accessed recommended community services. For each of the dependent variables, the response is either yes or no. For independent variables in a binary logistic regression, variables can be continuous or categorical (Laerd Statistics, n.d.-a). All independent variables measured in this study are categorical. The independent variables analyzed in this study are month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, primary school service recommended by SAP team, and primary community service recommended by SAP team. The hypotheses for each research question are listed below: Research question 1: Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, or incoming referral reason impact the probability of students receiving written parent permission to proceed with the SAP process? Null hypothesis (H0) 1: There is no significant relationship between the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, and incoming referral reason) and whether written parent permission was obtained.

Alternative hypothesis (H1) 1: At least one of the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, or

incoming referral reason) has a significant effect on whether written parent permission was obtained.

Research question 2: Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary school service recommended by SAP team impact the probability of students accessing recommended school services?

Null hypothesis (H0) 2: There is no significant relationship between the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, and primary school service recommended by SAP team) and whether students access recommended school services.

Alternative hypothesis (H1) 2: At least one of the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary school service recommended by SAP team) has a significant effect on whether students access recommended school services.

Research question 3: Does month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary community service recommended by SAP team impact the probability of students accessing recommended community services?

Null hypothesis (H0) 3: There is no significant relationship between the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, and primary community service recommended by SAP team) and whether students access recommended community services.

Alternative hypothesis (H1) 3: At least one of the independent variables (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, or primary community service recommended by SAP team) has a significant effect on whether students access recommended community services.

Prior to completing the binary logistic regression analyses, Spearman's correlations (r_{s}) were performed. Spearman's correlation is a non-parametric test that measures the association between two variables; Spearman's correlations were chosen over Pearson's correlations since the variables in this study are not continuous (Hauke & Kossowski, 2011). Harris (2021) explains the importance of carefully identifying and selecting variables to include in binary logistic regression models in order to create a stable model. Shipe et al. (2019) state that variables that do not significantly correlate with the outcome can be removed from the binary logistic model. Including all variables in the model can lead to unstable estimates and large standard errors (Bursac et al., 2008). Hypothesis tests (such as Spearman's) are the most popular criteria for selecting variables (Heinze et al., 2018).

After finding significant variables ($p \le .05$), a binary logistic analysis was performed with the significant associations. The Wald test was calculated in the binary logistic regressions, which determines if there is statistical significance for each of the independent variables (Laerd Statistics, n.d.-a). Statistically significant values are values in which the p-value $\le .05$. In addition, goodness-of-fit was assessed for the binary logistic regressions by using the Omnibus Tests of Model Coefficients. The Omnibus Tests of Model Coefficients provide the overall statistical significance of the model (Laerd Statistics, n.d.-a). The model is statistically significant if the p-value $\le .05$. The Nagelkerke R² is a pseudo R-squared measure that was computed with the binary logistic regression; it explains the variation of the dependent variable (Laerd Statistics, n.d.-a). Nagelkerke R² is preferable over the Cox & Snell R² but still should be interpreted with caution as it is not as straightforward as with a multiple regression (Laerd Statistics, n.d.-a). The variation is reported in percentages (Laerd Statistics, n.d.-a).

Odds ratios (*OR*) were also calculated from the binary logistic regression. An odds ratio measures the strength of the association between two variables (independent and dependent) (Chatterjee & Simonoff, 2012; SPSS Analysis, n.d.). Odds ratios that are greater than one indicate that there is a direct relationship between the independent variable and dependent variable, while an odds ratio less than one indicates that there is an inverse relationship between the independent variable and the dependent variable (Chatterjee & Simonoff, 2012; SPSS Analysis, n.d.). If the odds ratio is one, there is no relationship probability (Chatterjee & Simonoff, 2012; SPSS Analysis, n.d.).

The following assumptions affect the reliability and validity of a binary logistic regression (SPSS Analysis, n.d.). In addition to having a dichotomous dependent variable and at least one independent variable that is continuous or nominal, it is assumed that there is independence of observations (Laerd Statistics, n.d.-a; SPSS Analysis, n.d.). In this study, the data collected was SAP case data from each referral made to the SAP team. The outcome of one case did not influence the outcome of another, and all cases were independent of one another. In addition, for each variable in the study, only one answer could be chosen. Another assumption is that there is a linear relationship between continuous independent variables (Laerd Statistics, n.d.-a; SPSS Analysis, n.d.); in this study, there are no continuous independent variables. A third assumption is that there are at least 15 cases per independent variable (Laerd Statistics, n.d.-a; SPSS Analysis, n.d.), and this study exceeds that amount, with at least 25 cases per independent variable. Assumption four is that there is no multicollinearity between continuous independent variables (Laerd Statistics, n.d.-a; SPSS Analysis, n.d.). Again, there are no continuous independent variables in this study. Assumption five is that there are no significant outliers in the data (Laerd Statistics, n.d.-a; SPSS Analysis, n.d.). This study analyzed the data to test for outliers using case diagnostics and standardized residual values greater than 2.5 standard deviations as part of the binary logistic regression analysis.

Data Collection

The data was collected through PDE 4092 forms that were completed for the 2023-2024 school year for the Tunkhannock Area School District, grades K-12. Permission was first sought from the researcher through the PDE Office for Safe Schools to seek permission to utilize statewide data for the study. The PDE Office of Safe Schools gave two options to utilize PDE 4092 data. First, an initial letter of intent could be completed in which the PDE Data Governance Research committee would review the proposal and determine if the process for receiving data could continue. The second option was to receive permission from individual school(s) to provide the PDE 4092 data, as each school district owns its own SAP data. A letter of intent was completed but was not approved to move forward. The researcher then reached out to the Tunkhannock Area School District superintendent, and, once confirming there was no identifiable information on the PDE 4092 forms being used, the superintendent granted permission to utilize the data for this research study. The researcher also completed the application for approval from the Institutional Review Board (IRB) of Slippery Rock University. Once the IRB approved the research study, the researcher began the analysis of the pre-existing data.

District data from the PDE 4092 forms were obtained from the Student Assistance Program (SAP) District Reporting Site via the Pennsylvania Safe Schools Online Application at https://www.safeschools.pa.gov/SAP/Landing.aspx. A district username and password are needed to log into the website to access the district referral data. Once logged into the website, the district SAP team can access a district summary of all referrals for the year as well as individual referral data that was input from the PDE 4092 forms. Each SAP referral is given a case number, and the information maintained on the PDE 4092 form is non-identifiable. For each referral, a PDE 4092 form is filled out and then entered into the Pennsylvania Safe Schools Online Application by June 30th of each year. The PDE 4092 form has a total of 21 questions (see Appendix A for a copy of the form). There are instructions for filling out this form, which can be found in Appendix B. For the purpose of this study, data from questions two, three, four, five, seven, eight, and nine from each referral were utilized as the independent variables (month of referral, gender, race and ethnicity, grade level, special education, incoming referral source, and primary incoming referral reason), and data from questions 12, 17, and 19 from each referral were utilized as the dependent variables (was written permission obtained from parent/guardian for the SAP process, was the primary school service identified accessed, and was the primary community service identified accessed). The researcher did not include data from question 6, which inquired if student was legally emancipated, in the binary logistic regression as there were no referrals that responded "yes" to this question.

Population

Tunkhannock Area School District (TASD) is a rural school district in Wyoming County, Pennsylvania. TASD is a relatively small school district, with a total of 2,020 students enrolled in the 2023-2024 school year (Pennsylvania Department of Education, 2024b). The district consists of three school buildings: the primary center (grades K-2), the intermediate center (grades 3-7), and the high school (grades 8-12), with 413 students in the primary center, 756 students in the intermediate center, and 845 students in the high school (six students were unaccounted for in the data) (Pennsylvania Department of Education, 2024b). Of the 2,020 students, 51% were male and 49% were female (Pennsylvania Department of Education, 2024b). The majority of students, 95%, were White, 3% were Multi-Racial, 1% were Hispanic, and <1% were Black/African American (Pennsylvania Department of Education, 2024b). Tunkhannock Area has a fairly large special education population, with 22.2% of students receiving special education services (Pennsylvania State Data Center, 2024). TASD also has an extremely large low-income population, with 80.34% of its students coming from low-income families (Pennsylvania Department of Education, 2024a). For the 2023-2024 school year, there were a total of 98 referrals to SAP in TASD. There were 75 referrals at the high school, 16 at the intermediate center, and 7 at the primary center. That means almost one out of 20 students (approximately 4.9%) were referred to SAP, with the highest referral rate at the high school (8.9%), followed by the intermediate center (2.1%) and primary center (1.7%).

Limitations and Delimitations

One limitation of this study is that it only includes data from one school district in Pennsylvania, which is a small rural district, with little racial and ethnic diversity, moderately high special education population, and an extremely high low-income population. Therefore, data may not be generalizable to other school districts in Pennsylvania. Another limitation is that this study is only analyzing factors that are included in the PDE 4092 form. There are likely other factors that influence whether or not students access services that are not being taken into account in this study. TASD's low-income population, for example, could influence whether students access services, but this data is not collected for referrals. A third limitation is that this study is just assessing the probability of a student accessing services and does not imply causation. A fourth limitation is that there is no reliability or validity information regarding the data collection tool, the PDE 4092. Although the same form is used across the state to collect data, there is not any available information on the reliability or validity of the data it collects. Finally, although not necessarily a limitation, it should be noted that the researcher is a SAP team member at TASD. The data collected for this study was completed by all SAP team members in the district (each case manager assigned to the referral completes the PDE 4092) and the end-of-school year data was put into the Pennsylvania Safe Schools Online Application by another SAP team member. All data was collected and entered prior to the beginning of this research study.

There are also some delimitations to this study. First, not all data from the PDE 4092 is being analyzed. The researcher chose to focus on variables that may impact whether or not a student accesses the recommended services by the SAP team, as the purpose of SAP is to connect students to beneficial services, both in school and in the community. The researcher also chose to include data on written parent permission to proceed with the SAP process, as lack of parent permission is a barrier to students receiving services. In addition, the question regarding legal emancipation was not included in the study as no students in the SAP process being analyzed fell into this category. A second delimitation is that only one year of data was utilized in the study. Only data from the past school year was available on the Pennsylvania Safe Schools Online Application. Finally, a third delimitation was that only quantitative data was used for this study. Qualitative data, from students, parents, and/or SAP team members could give further insight into why students ultimately did not access recommended services.

Summary

In summary, it was hypothesized that at least one of the variables in this study (month of referral, gender, special education status, race and ethnicity, grade level, incoming referral

source, incoming referral reason, primary school service recommended by SAP team, or primary community service recommended by SAP team) would have a significant effect on if parent permission was obtained, if students accessed recommended school services, or if students accessed recommended community services. Hypothesis testing using Spearman's correlations was first performed to find which independent variables had an association with the dependent variables. Those associations were then further analyzed by performing binary logistic regressions. In addition, descriptive statistics from this study were compared to district demographic information as well as state SAP summary data (see Appendix C for PA SAP State Summary Data for the 2023-2024 school year) to see if any major indicators were noted that could affect the interpretation of the results. The results of this study are presented in the following chapter.

Chapter 4: Results

Data Coding

The researcher first coded responses from the district's PDE 4092 forms that were being used as independent or dependent variables in the study into numerical scales. The referral month was coded with January labeled as 1 through December labeled as 12. Gender was coded as 0 for male and 1 for female. Incoming referral source was labeled as follows: 0-administrative, non-disciplinarian; 1-school mental health professionals; 2-disciplinarian; 3-instructional staff; 4-non-instructional staff; 5-parent/guardian/other family member; 6-schoolbased teams; 7-peer; 8-Safe2Say Something; 9-Self; 10-Other. Race/Ethnicity was labeled as: 0-American Indian/Alaskan Native; 1-Asian; 2-Black/African American; 3-Hispanic; 4-Multi-Racial; 5-Native Hawaiian or other Pacific Islander; 6-White. Grade level was labeled with the number that corresponds to the grade level (i.e. 12th grade was 12); kindergarten was labeled as

0. Primary incoming referral source received the following labels: 0-internalizing behaviors; 1externalizing behaviors; 2-academic concerns; 3-attendance; 4-bullying by others/bullying perpetrator; 5-policy violation related to substance use; 6-other policy violation; 7-substance use; 8-cutting-self-harm; 9-physical health concerns; 10-suicide ideation/gesture/attempt/crisis referral; 11-re-entry to school from out of school placement; 12-social concern; 12-other. Primary school service recommended by core team was labeled as: 0-academic supports; 1school team supports; 2-group intervention; 3-one-to-one counseling with school counselor and/or school psychologist; 4-services by/from school social worker; 5-one-to-one follow-up with team member or other school personnel; 6-alternative school placement; 7-crisis intervention; 8-other school services; 9-no school services recommended. Primary community service recommended by core team was labeled: 0-Children and Youth; 1-continuing drug and alcohol treatment services; 2-continuing mental health treatment services; 3-other community/agency services; 4-screening by behavioral health SAP liaison; 5-screening by drug and alcohol SAP liaison; 6-screening by mental health SAP liaison; 7- natural community supports; 8-no community/agency services recommended.

Special education, written permission obtained from parent/guardian for the SAP process, primary school service identified accessed, and primary community service identified accessed were all "yes" or "no" responses. For all, "yes" was coded as 1 and "no" was coded as 0. The coded data from the 98 referrals was the input into SPSS. The case number from each referral was also included in the SPSS data. Although the case number was not utilized in any data analyses, it was recorded to organize the data and easily reference cases if needed. All analyses were completed in SPSS from this data set.

Descriptive Statistics

Frequencies were found for all variables. A total of 98 SAP referrals were made in the Tunkhannock Area School District during the 2023-2024 school year. The majority of the cases were referred in November (17.3%), March (14.3%), and April (12.2%). Fifty-one percent of the referrals were for female students, and 94.9% were for White students. Grades 8-11 had the highest percentage of referrals (18.4% for 8th, 15.3% for 9th, 22.4% for 10th, and 11.2% for 11th), with 24.5% of the total referrals being for students who received special education services. The majority of the referrals were made by instructional staff (61.2%), followed by peers (12.2%) and non-instructional staff (11.2%). The primary incoming referral reasons were for externalizing behaviors (32.7%), academic concerns (21.4%), and substance use (10.2%). Out of the 98 referrals, written permission from the students' parents to continue with the SAP process was obtained for 63 (64.3%) students.

It is important to note, however, that although permission was obtained for 63 students, the SAP process was discontinued for an additional 14 students (meaning that recommendations from the SAP team did not occur). The researcher investigated the PDE 4092 forms and found that the reasons for discontinuing the SAP process for these 14 cases included: already in treatment (5 students), student refusal (4 students), referral to outpatient services based in school (2 students), parent refusal (1 student), SAP process was not appropriate (1 student), and student no longer enrolled with LEA (local education agency/school district) (1 student).

Of the 49 students who continued through the SAP process, 38 students (77.6%) had school services recommended by the SAP team and 25 students (51.0%) had community services recommended by the SAP team. For students that had school services recommended to them by the SAP team, the most frequently recommended school service was "other" school services (63.2%), followed by academic supports (13.2%), group intervention (7.9%), and services by/from school social worker (7.9%). Of the students that had school services recommended to them, 89.5%, accessed the recommended services. The most frequently recommended community service was screening by drug and alcohol SAP liaison (28%), followed by screening by mental health SAP liaison (24%), and continuing mental health treatment services (20%). Of the students who had community services recommended to them, 88% accessed the recommended services. It should be noted that the data reflects only the primary school service and primary community service that was recommended by the SAP team, so the data does not reflect all services that may have been recommended to a student (e.g. if a student was recommended for academic supports and services by/from school-based social worker, only the primary school service that was recommended was documented). However, data could reflect if a student was recommended for a primary school service and a primary community service (e.g. academic supports as a school service and screening by a mental health SAP liaison as a community service). A full summary of district responses to the PDE 4092 can be found in Appendix D.

Research Question 1

Spearman's correlations were performed to determine if there was an association between the dependent variable (written permission obtained from parent/guardian for the SAP process) and the independent variables (referral month, gender, special education status, race and ethnicity, grade level, incoming referral source, and incoming referral reason). Ninety-eight cases were included in the analysis. There was a statistically significant negative correlation between written permission obtained and grade level, $r_s(96) = -.200$, p = .049. No other variables showed a significant correlation. Table 1 shows the results of the Spearman's correlations analyses for research question one.

Table 1

Variable	r_s	р
Referral month	.017	.865
Gender	.122	.233
Special education status	.078	.446
Race and ethnicity	173	.089
Grade level	200	.049
Incoming referral source	109	.286
Primary incoming referral reason	019	.853
Note: N=08 n volues are two toiled	1	

Spearman's Correlations for Written Permission for SAP Process

Note: N=98. *p*-values are two-tailed.

A binomial logistic regression was then performed to determine the effects of grade level on the probability of students receiving written parent permission to proceed with the SAP process. The predictor variable was grade level (K-12), and the outcome variable was written permission obtained (yes or no). There were no standardized residuals with a value greater than 2.50 standard deviations (no outliers). All 98 cases were included in the analysis. The logistic regression model was statistically significant, $\chi^2(1) = 7.077$, p = .008, according to the Omnibus Tests of Model Coefficients, indicating that grade level significantly predicted if written permission was obtained. The model explained approximately 9.6% (Nagelkerke R^2) of the variance in written permission obtained. Increasing grade level was associated with a reduction in the likelihood of receiving written permission (OR = .788, 95% CI [.648, .959], p = .017). For each one-year grade increase, the odds of receiving written permission decreases by 21.2%. With the data from this analysis, we can reject the null hypothesis and accept the alternative hypothesis.

Research Question 2

Spearman's correlations were performed to determine if there was an association between the dependent variable (recommended school service accessed) and the independent variables (referral month, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, and school service recommended) Thirty-eight cases were included in the analysis, as thirty-eight cases had school services recommended by the SAP team. There was a statistically significant positive correlation between school service accessed and school service recommended, $r_s(36) = .385$, p = .017. No other variables showed a significant correlation. Table 2 shows the results of the Spearman's correlations analyses for research question two.

Table 2

Spearman's Correlations for School Service Accessed

Variable	r_s	р
Referral month	.099	.555
Gender	018	.914
Special education status	-2.79	.089
Race and ethnicity	118	.482
Grade level	-1.26	.450
Incoming referral source	070	.677
Primary incoming referral reason	.124	.459
School service recommended	.385	.017
Note: n=38. p-values are two-tailed		

A binomial logistic regression was then performed to determine the effects of the types of school services recommended by the SAP team on the probability of students accessing the recommended services. The predictor variable was school services recommended by the SAP team (academic supports, school team supports, one-to-one counseling with school counselor and/or school psychologist, group intervention, services by/from school social worker, one-to-one follow-up with team member or other school personnel, alternative school placement, crisis intervention, and other school services) and the outcome variable was recommended school service accessed (yes or no). Missing data was recoded as "999." The sample consisted of 38 students for whom both school services recommended and school service accessed data were available after removing missing data coded as "999." Due to quasi-separation and sparse data challenges, this did not produce a stable model. A reduced categorical model was considered but was rejected by the researcher as the school services recommended variable could not be collapsed into meaningful categories.

A binomial test was then conducted to assess whether the proportion of students who accessed recommended services differed significantly from 50%, the expected access rate under the null hypothesis of equal likelihood of accessing or not accessing services. A binomial test compares frequencies of two categories of a dichotomous variable to what is expected (IBM, 2021b). Of the 38 students who were recommended for a service, 34 accessed the service (89.5%). This was significantly higher than the expected 50% access rate, p < .001, 95% CI [0.78, 0.97]. This result supports the interpretation that students who are recommended for school services are highly likely to access them when recommended, indicating strong follow-through for school-based service recommendations. Proportions for specific types of recommended services are presented in Table 3.

Table 3

Recommended Service	Total Recommended	Total Accessed Service	Proportion Accessed Service
Academic supports	5	2	2/5 = 0.40
School team supports	1	1	1/1 = 1.00
One-to-one counseling	1	1	1/1 = 1.00
Group intervention	3	3	3/3 = 1.00
Services by/from school social worker	3	3	3/3 = 1.00
One-to-one follow-up	1	1	1/1 = 1.00
Other school services	24	23	23/24 = 0.96
Total	38	34	34/38 = 0.89

Proportions for School Services Accessed by Service Type

Note: Crisis intervention and alternative school placements were not included as there were no recommendations for these school services.

The proportion of students who accessed the recommended service varied by recommendation type. Students recommended for school team supports, one-to-one counseling, group intervention, services by/from school social worker, one-to-one follow-up accessed the service 100% of the time. Students recommended for other school services accessed the service 96% of the time. In contrast, students recommended for academic supports accessed services only 40% of the time. With the data from the Spearman's correlations and binomial test, we can reject the null hypothesis and accept the alternative hypothesis.

Research Question 3

Spearman's correlations were performed to determine if there was an association between the dependent variable (recommended community service accessed) and the independent variables (referral month, gender, special education status, race and ethnicity, grade level, incoming referral source, incoming referral reason, and community service recommended) Twenty-five cases were included in the analysis, as 25 cases had community services recommended by the SAP team. There were no statistically significant correlations identified between any of the variables. Table 4 shows the results of the Spearman's correlations analyses for research question three. Since there were no correlations found between the independent variables and if recommended community service was accessed, a binomial logistic regression was not performed for research question three. Furthermore, we cannot reject the null hypothesis nor accept the alternative hypothesis.

Table 4

Variable	\mathcal{F}_{S}	р
Referral month	009	.967
Gender	.355	.082
Special education status	123	.558
Race and ethnicity	075	.720
Grade level	.017	.934
Incoming referral source	.174	.406
Primary incoming referral reason	.154	.461
Community service recommended	227	.275
Note: n=25. p-values are two-tailed.		

Chapter 5: Discussion

Conclusions

State and District Data

Overall, the demographics of those referred to TASD SAP were similar to the demographics of the district. For gender, 51% of the students referred to the program were female and 49% were male; the district's population is 49% female and 51% male. For all of the SAP referrals, 24% of the students referred received special education services while the district had a 22% special education population. Race and ethnicity were also similar; both SAP referrals and district population total were 95% White and 3% Multi-Racial. Less than 1% of the district population were Black/African American and 0% were Native Hawaiian or other Pacific Islander, while 1% of SAP referrals were Black/African American, and 1% were Native Hawaiian or other Pacific Islander. District data for population demographics is based on information gathered by October 2nd of the 2023-2024 school year (Pennsylvania Department of Education, 2024b), so this could possibly explain the discrepancy with Native Hawaiian or other Pacific Islander.

When compared to state summary statistics, there are some similarities and differences among the data. Statewide, September, October, and November were the three months with the most referrals. In TASD, November, March, and April had the most referrals. Both state and district summaries indicate that instructional staff made the majority of the referrals to SAP. The other leading incoming referral sources for the state were school mental health professionals, non-instructional staff, and disciplinarians. For TASD, peers, non-instructional staff, and disciplinarians were the top referral sources after instructional staff. Both state and district summaries indicate that grades 8-10 receive the highest number of referrals. The top primary incoming referral reason for both TASD and the state was externalizing behaviors. For TASD, academic concerns, substance use, social concern, and 'other' were the next leading referral reasons, and internalizing, 'other', academic concerns, and social concerns were the next leading reasons for the state. One major difference that was noted was that internalizing behaviors were not among the top five referral reasons for primary incoming referral reasons in Tunkhannock but was the second leading referral reason for the state. Additionally, substance abuse was the third leading referral reason in Tunkhannock but was not in the top five reasons for referral across the state.

The percentage of receiving written permission from parents/guardians was similar between state and district data. TASD had a 64% rate of receiving parent/guardian permission to proceed with the SAP process, while the state had a 61% rate. Of all the referrals received in TASD, 39% had school services recommended by the SAP team and 26% had community services recommended by the SAP team. For the state, 48% had school services recommended and 36% had community services recommended. For the referrals that had school services recommended, 89% of the students accessed those services in TASD, and 96% of the students accessed those services statewide. For the referrals that had community services recommended, 88% of the students accessed those services in TASD, and 96% of the students accessed those services statewide. For the referrals that had community services recommended, 88% of the students accessed those services in TASD, and 90% of the students accessed those services statewide. While the percentage of students who accessed services were lower in TASD compared to the state for both school and community services, both TASD and the state data showed that the majority of students who had services recommended to them accessed those services. This is aligned with Fertman et al.'s (2003) research, which also showed that the majority of students followed through with the recommendations of the SAP team.

Research Questions

As grade levels increase, there is a decrease in the likelihood of receiving written permission to proceed with the SAP process. As the grade level increases by year, there is a 21.2% decrease in the odds of receiving written permission. This is concerning, as written permission is needed to continue with the SAP process; team recommendations for services cannot be made without this step. In addition, the majority (both district and statewide) of SAP

75

referrals are secondary students, indicating that they are less likely to receive recommendations for service prior to graduating and becoming independent of school supports.

Results from the second research question, however, indicate that students who are recommended for school services are highly likely to access them. School team supports, one-to-one counseling, group intervention, services by/from school social worker, and one-to-one follow up with a SAP team member or other school personnel had a 100% rate of being accessed by the student, with "other" school services at a 96% rate. Academic supports, however, only had a 40% rate of being accessed. Analysis from the third research question regarding community services accessed indicated that there were no significant correlations to show that the type of community services recommended by the SAP team affects if the students access the recommended services. However, it should be noted that, overall, 22 out of 25 students (88%) accessed the recommended community services.

Additional Findings

Despite the fact that the majority of students who had services recommended to them accessed those services, only 50% of all referrals proceeded through the SAP process to get to this point. Thirty-six percent of students did not receive the initial written permission from parents/guardians to proceed with the process. An additional 14% discontinued the process after the original permission was received. Across the state, a total of 47% did not proceed through the entire SAP process. Thirty-nine percent did not receive the initial written permission to proceed and an additional 8% discontinued the process after the original permission was received. This data shows that not following through with the SAP process (either not receiving written permission or discontinuing the process) played a large role in students not accessing school and community services.

Implications

One of the major findings of this research indicates that PA SAPs should focus on how to increase receiving parent/guardian permission for the SAP process and ensuring that the process is followed. Referrals are made to SAP so that barriers to student success can be addressed, but the data shows that approximately 50% of the referrals made do not utilize the SAP process to get recommendations for school and community services to address these barriers. This is parallel to the data which states that approximately half the children with a mental health diagnosis do not receive treatment (Health Resources and Services Administration Maternal and Child Health Bureau, 2020; Sanchez et al., 2018; Whitney and Peterson 2019). This linkage is important because it demonstrates a need to determine why mental health services are not being accessed and how it can be improved. For PA SAPs, including TASD, a major consideration is determining why written permission is not being provided by parents/guardians.

Specifically in TASD, the data showed that as grade level increased, there was a decrease in receiving written permission. The TASD SAP team should consider focusing on how they can increase receiving written permission as the grade levels increase. Further research should be conducted in order to determine if this is specific to TASD or if grade level is a predictor across the state. However, it is also important to consider and evaluate other factors that can impact a parent/guardian's decision to give permission to proceed with the process. One way PA SAPs can begin to gather more data is to include more information on the PDE 4092 form. If written permission is not obtained, SAP team members can indicate why the parent/guardian permission was not obtained. SAP can consider if parent/guardians did not respond to requests for permission, if parents didn't believe the services were needed, if parents prefer to handle the situation without assistance from the SAP team, or if there was a discrepancy between parent, student, and school staff perceived need of services.

Something the TASD should specifically consider is that rural communities are susceptible to barriers to treatment. They are often affected by the stigma associated with mental health disorders and the concern of anonymity if they participate in services; there is also a lack of family engagement that is more prominent in rural communities (Svistova et al., 2022; Waid & Kelly, 2020). The TASD SAP team should consider if this is affecting written permission being obtained and ways to combat these issues. Another important factor for the TASD SAP team to explore is the low rate of follow-through for accessing academic supports. The team should consider possible reasons for students not accessing these specific services and how to increase the access rate. The team may want to consider the fourth step of the SAP process, which is follow-up. The team can reflect on addressing barriers during that part of the SAP process. Additional research should be done to see if other districts have a low rate of accessing academic supports or if other services show significantly lower access rates.

In this study, there were no disparities found among race and ethnicity, gender, or special education status. Further research with a larger sample size should be conducted to confirm this finding. There were also no significant predictive values among the primary incoming referral reasons. Much of the literature focuses on internalizing versus externalizing behaviors. For example, Eijgermans et al. (2021) and Xu et al. (2023a) found that individuals with externalizing behaviors were more likely to access mental health services than those with internalizing behaviors. One possible reason for this is that externalizing behaviors are more noticeable and more disruptive than internalizing behaviors (Achenbach, 1966; Esch et al., 2014; Olivier et al., 2020; Raknes et al., 2017; Sau Man Ng & Sui Ling Ng, 2022; Vergunst et al., 2023). However,

on the PDE 4092 form, there is a multitude of incoming referral reasons to choose from in addition to internalizing and externalizing behaviors. It is possible that there are too many options to find a statistically significant difference. One consideration could be to modify the PDE 4092 to have externalizing behaviors and internalizing behaviors as umbrella terms and then place more detailed reasoning under each term. This could help determine if internalizing and externalizing behaviors are predictive of obtaining written permission. It is also important to note that the sample for this study only had a total of 4 cases, or 4%, with internalizing behaviors as the primary incoming referral reason. The state data, however, indicated that 18% of the referrals had a primary incoming referral reason of internalizing behaviors. TASD SAP should consider this underrepresentation and determine the accuracy and/or implications of this data. The team can consider if further training is needed either for team members to accurately report incoming referral reasons or for the district (including all possible referral sources) to recognize and refer internalizing behaviors to the SAP team.

When interpreting the results of this study, it is also important to understand the possible barriers that students and families face with accessing services. Research has found that lack of time (Anderson et al., 2017; Johansson et al., 2019; Waid & Kelly, 2020), lack of mental health literacy/awareness (Anderson et al., 2017; Lu, 2017; Stuckey et al., 2021; Waid & Kelly, 2020), personal beliefs, attitudes, and stigma (Lu, 2017; Waid & Kelly, 2020), concerns about confidentiality/anonymity, lack of trust (Lu, 2017; Stuckey et al., 2021; Waid & Kelly, 2020), or wanting to be self-reliant (Waid & Kelly, 2020) can all impact accessing services. While these variables were not included in the analysis, they should be considered by SAP teams to help improve the number of students who get written permission and access services. These tie into Andersen's BMHSU predisposing, enabling, and need factors. Personal beliefs (including

attitudes, stigma, concerns with confidentiality, and lack of trust) would fall into predisposing factors. Lack of time and mental health literacy/awareness would fall into enabling factors, and self-reliance (the belief that they can take care of the issue without assistance) would fall into the need category. Graham et al. (2017) and Xu et al. (2023a) found that need factors are the strongest predictive factors for who accesses mental health services. Within the need factors, there is a differentiation between actual need and perceived need. As stated earlier, SAP teams should consider the students' and families' perceived need for services and if there is a discrepancy between the school staff's perceived need for services. This can give insight into one of the most predictive factors for mental health service access. However, SAP teams should also consider the predisposing and enabling factors mentioned when looking to improve written permission and access to services.

Limitations

In addition to the limitations discussed in Chapter 3, additional limitations were noted when analyzing the data. One limitation of the study was the small sample size, particularly for research questions two and three. While there was a total of 98 referrals to the TASD SAP, only 38 cases had school services recommended by the SAP team, and only 25 cases had community services recommended by the SAP team. Small sample sizes can limit statistical power and the generalizability of the data. The small sample sizes likely impacted the analyses of finding predictive variables of students accessing the recommended services of the SAP team. In addition to the small sample size, there were multiple categories for types of services that were recommended (nine types of school services and eight types of community services). Because the sample size was already small, the distribution among the types of services led to small numbers in each category. For example, the proportion of students who accessed academic supports was two out of five. While this equates to only 40% of students accessing academic supports, it should be taken into consideration when interpreting these results that only five total students were recommended for this type of service. On a final note, with regard to small sample size and large category variation, the third research question was unable to find a correlation between the independent variables and if community service was accessed. Therefore, the researcher was unable to further investigate predictive values.

The binary logistic regression model that was performed for research question one had a Nagelkerke R^2 of 9.6%. This is a low R-squared value and indicates that only a small portion of the predictive factors may be influencing the outcome (if written permission was obtained); other factors may be influencing the outcome. The binary logistic regression model that was performed for research question two didn't converge due to quasi-separation and sparse data challenges. This is possibly due to the small sample size and multiple types of recommended services, as discussed above. This produced an unstable model with unreliable results. Although a binomial test was utilized and provided important data analyses, the binary logistic model is a more powerful tool that provides more insight into the relationship between a predictive variable and outcome variable.

Future Research

Further research should be conducted on a larger scale, including additional school districts in PA or even statewide data. This study can be replicated with larger samples to see if a larger sample size yields additional predictive factors. Larger samples could increase statistical power and lead to more stable models. In addition, TASD is a rural district that is composed of mostly White students with a high incidence of low socioeconomic status and special education population. A more diverse population would allow the findings to be more generalizable. An

additional study with multiple districts across PA can also compare different regional areas with different demographic statistics to see if there are differences among regions.

Another suggestion for future research would be to conduct a qualitative study for SAP teams. While some information might be precluded from the PDE 4092 forms, SAP team members can provide insight into what barriers they perceive impact receiving written permission and accessing services. A qualitative analysis would allow for the inclusion of additional factors and can be guided by Andersen's BMHSU predisposing, enabling, and need factors. In turn, information from these analyses could be utilized to improve the BMHSU, specifically in the area of mental health, which is a noted area of need for Andersen's model (Eijgermans et al. 2021; Graham et al., 2017; Pilar et al., 2020). Additional research that is focused on identifying barriers to accessing services, specifically receiving written permission for the SAP process, will allow SAP teams to make necessary changes to ensure that students who need services are, in fact, accessing those services.

Summary

This preliminary analysis of SAP data indicates a need to focus on determining barriers that impede receiving parental permission to proceed with the SAP process. While SAPs have shown to be effective in linking students to needed services and show increased positive outcomes related to academic achievement and quality of life, only 50% of the SAP referrals ended up completing the entire SAP process. Considering the majority of students who completed the SAP process accessed the recommended services, it becomes paramount that the focus needs to be on increasing the number of students that complete the SAP process. Current data showed that grade level was a contributing factor to receiving written permission from parents/guardians; as the grade level increased, the likelihood of receiving parent permission decreased. Data from this study also showed that academic supports had the lowest rate of being accessed among school services being recommended by the SAP team. Further research should be conducted to see if these are predictive factors across all PA SAPs or if other predictive factors are identified.

Unfortunately, poor mental health is on the rise, which is indicative of poor outcomes (including areas of academic achievement), so it is increasingly important that students are receiving the services they need. Research has shown that receiving treatment can improve outcomes, but getting students to access these services is a current hurdle. Additionally, further research can be conducted to gain more insight to address the barriers that are preventing certain students/families from completing the SAP process. As stated above, this study can be replicated to include additional districts in PA to confirm this study's finding or provide additional information. PDE can consider making modifications to the PDE 4092 form to include more information on why permission was not obtained. In addition, further research can include qualitative studies to gain insight from SAP team members across the state to help identify barriers, improve the SAP process, and ultimately increase the percentage of referrals that complete the SAP process. The BMHSU is used to help identify barriers to access to services and can be used as a guide to begin to distinguish factors that impact families' decisions to proceed with the SAP process. Data can then also be used to help mold a better-fitted BMHSU for mental health as well. Once barriers are identified, SAPs can work to improve access to services for children in need.

Utilizing evidence-based practices, ongoing evaluation of SAPs, and creating improvement plans are essential components of both state and national guidelines for SAPs (Fertman et al., 2000; Kanu et al., 2015; Moore & Forster, 1993; Vincent et al., 2019; Wagner et al., 2019). In addition, the WSCC framework from the CDC also encourages the use of evidence-based practices (Centers for Disease Control and Prevention, 2023a). Furthermore, much like the BMHSU framework, the overall goal of SAP is to increase access to services for all individuals. By utilizing the information in this study and continuing to analyze SAP data, SAPs can continue to play a fundamental role in assisting students with accessing services and can increase the number of individuals who benefit from the program.

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Appendix A

2023-2024 School Year PDE 4092

2023-2024 SCHOOL YEAR PA STUDENT ASSISTANCE PROGRAM (PDE 4092) For your records only! Do not submit data on this form. Data must be submitted and released online at https://www.safeschools.pa.gov Deadline: June 30, 2024 Note: Record each referral on its own separate PDE 4092 reporting form! *Cyber Charter Schools - Please identify the stu-	INCOMING REFERRAL SOURCE Administrative, non disciplinarian School Mental Health Professionals (school counselors/ social workers/psychologist) Disciplinarian Instructional staff Non instructional staff Parent/Guardian/Other family member School Based Team(s) O Tiered D Threat assessment	10. DID YOU GATHER DATA AS PART OF THIS SAP REFERRAL? O Yes O No Please select the type of data collected (Select all) O Behavioral checklist O Observations Academic records Attendance records Disciplinary records
dent's county of residence. 1. REFERRAL NUMBER • County of Residence	O Threat assessment O Peer O Safe2 Say Something O Self O Other (write in):	11. WAS PARENT/GUARDIAN CONTACT INITIATED? O Yes O No 12. WAS WRITTEN PERMISSION OBTAINED FROM PARENT/GUARDIAN FOR THE SAP PROCESS? O Yes O No
2. MONTH OF REFERRAL O September O December O March O June O October O January O April O July November O February O May O August 3. GENDER O Male O Female O Non-binary/Other Gender 4. RACE/ETHNICITY American Indian/Alaskan Native Asian Black/African American Hispanic Multi-Racial Native Hawaiian or other Pacific Islander (not Hispanic) White	9. PRIMARY INCOMING REFERRAL REASON (Select One) O Internalizing behaviors Externalizing behaviors Academic concerns Attendance Bullied by others/bullying perpetrator Policy violation related to substance use Other policy violation Cutting—self harm Substance use Physical health concerns Suicide ideation/attempt/crisis referral Re-entry to school from out of school placement Social concerns Other referring criteria factors (e.g. grief & loss, home-lessness etc.) (write in) :	 13(A). IF SAP PROCESS DISCONTINUED, INDICATE REASON Student no longer enrolled with LEA Parent refusal/written permission not obtained Parent refusal/written permission not obtained and student referred to other community services/ supports Parent refusal/written permission not obtained and student referred to other in-school services/supports Student refusal SAP process was not appropriate Already in treatment. Please note - this is not nec- essarily a reason to discontinue Referral to outpatient services based in school Other (write in)
5. GRADE LEVEL	NOTES:	
6. LEGALLY EMANCIPATED O Yes O No 7. SPECIAL EDUCATION O Yes O No		

ANSWER BELOW IF	SAP PROC	CESS WAS DISCONTINUED		
13(B). (Continued) IF THE SAP PROCESS WAS DISCONTINUED, WHAT O O Academic supports (e.g., tatoring, speech/language supports, Title I, etc.) O School team supports (e.g., MTSS) O Group intervention (e.g., Skill building, support) O One-to-one counseling with school counselor and/or school psychologis O Services by/from school social worker O One-to-one follow-up with team member or other school personnel	£	Alternative school placement Crisis intervention Other school services (write in) No school services recommended		
DID THE SAP TEAM CREATE AN ACTION PLAN FOR THE STUDENT?	,	RE. DO NOT COMPLETE REMAINDER OF FORM.	FOR THIS REFERRAL?	
(RECOMMENDATIONS COORDINATED FOR THIS REFERRAL) O Yes O Yes O No O Yes O No				
6. PRIMARY SCHOOL SERVICE RECOMMENDED BY SAP TEAM (Select or	ne)	18. PRIMARY SERVICE RECOMMENDED BY SAP TEAM (Select	one)	
School Services	Primary Service	Community Services	Primary Service	
Academic supports (e.g., tutoring, speech'language supports, IEP, Title I, etc.)	0	Children and Youth	0	
School team supports (e.g., MTSS)	0	Continuing drug and alcohol treatment services	0	
Group intervention (e.g., Skill building, support)	0	Continuing mental health treatment services	0	
One-to-one counseling with school counselor and/or school psychologist	0	Other community/agency services (write in)	0	
Services by/from school social worker	0	Screening by behavioral health SAP liaison (e.g., combined D&A	0	
One-to-one follow-up with team member or other school personnel	0	and MH)	0	
Alternative school placement	0	Screening by drug and alcohol SAP liaison	0	
Crisis intervention	0	Screening by mental health SAP liaison	0	
Other school services (write in)	0	Natural community supports	0	
No school services recommended	0	No community/agency services recommended	0	
7. WAS THE PRIMARY SCHOOL SERVICE IDENTIFIED ACCESSED? O Yes O No O No school services recommended		19. WAS THE PRIMARY COMMUNITY SERVICE IDENTIFIED AD		

20. WAS THERE A RECCOMENDATION FOR SCREENING BY A SAP LIASION? Note: This question is only available if you select one of the 3 screening options from the list of community services from question 17.						
RECOMMENDATION(S) FROM SCREENING (Select one)						
Liaison Recommendation	Primary Service	Liaison	Recomme	ndation-cor	ntinued	Primary Service
Behavioral health assessment (e.g., combined D&A and MH)	0		cial service o ly services)	community age	encies (e.g., Children and Youth	0
Drug and alcohol assessment	0	Group in	tervention (e.g., Skill build	ling, support)	0
Mental health assessment	0	No recor	nmendation			0
One-to-one with drug and alcohol liaison	0	Informat	ion not avail	lable		0
One-to-one with mental health liaison	0	Screenin	g did not oe	cur		0
Other (write in)	0					
21. PLEASE SELECT HOW EACH ITEM BELOW INFLUENCED T	HE DESIRED	OUTCOMES	FOR THIS	REFERRAL		
		Contributed	Impeded	No Effect / Not Applica	ble Don't Know	
Parent/Guardian participation		0	0	0	0	
Access to agency/liaison service(s)		0	0	0	0	
Transportation to access primary recommended out of school service	s(s)	0	0	0	0	
Insurance to access primary recommended out of school service(s)		0	0	0	0	
Access to school support personnel and/or behavioral support person	nel	0	0	0	0	
Other (write in)-		0	0	0	0	
NOTES:						

Note. From "2023-2024 School Year PA Student Assistance Program (PDE 4092)" by the

Pennsylvania Department of Education, n.d.-a

(https://www.safeschools.pa.gov/BlankReports/2023-2024/SAP_Blank_PDE4092_2023-24.pdf).

Appendix B

Instructions for Completing the 2023-2024 PDE 4092

Referral number For the SAP team sorting purposes. Do not use social security numbers or student I.D. numbers.

2. Month of referral

Indicate the month the referral was made.

- 3. Gender Select based on the gender identity as defined by the student.
- 4. Race/Ethnicity Based on the standards of Census Bureau definitions.
- 5. Grade at time of referral Self-explanatory.

6. Is this student legally emancipated?

If "Yes", all Parent/Guardian questions will automatically be answered "Not Applicable". Students are not automatically considered emancipated once they reach the age of 18. Even after a student has reached the age of 18, the school is still required to obtain parental permission unless the student is legally emancipated. The school must verify emancipation. The Pennsylvania Department of Education defines legal emancipation as a student who lives apart from the parent, is financially independent of the parent, and is responsible for his/her own welfare and behavior. Students who are married and living with a spouse are also considered to be emancipated.

7. Special Education

Has this student been officially identified to receive special education services at the time of current referral?

8. Incoming referral source (Select one)

Select only one referral source. Note: Instructional staff includes teachers and Non Instructional includes classroom aides, secretaries, custodians, cafeteria staff, bus driver, etc.

Administrative, non disciplinarian- Self-explanatory. School Mental Health Professionals (school counselors/social workers/psychologist) - Self-explanatory. Disciplinarian - Self-explanatory.

Instructional staff- Self-explanatory.

January 9, 2024

Non instructional staff- Self-explanatory. Parent/Guardian/Other family member- Self-explanatory. School Based Team(s) Tiered/Threat assessment - Self-explanatory. Peer- Self-explanatory. Safe2Say Something – Referral is a result of a Safe2Say contact. Self- Self-explanatory. Other- Self-explanatory.

9. Primary incoming referral reason

Select only one primary reason why this student was referred to the SAP team. Internalizing behaviors – Behaviors that may be difficult to detect but are associated with emotions directed inward (anxiety, stress, depression, fear). It includes such things as being withdrawn, quiet or irritable; expressing negative beliefs or paranoid thoughts; frequent somatic complaints; and concentration problems. Some internalizing issues may present as externalizing behaviors (e.g., obsessive-compulsive disorder). Externalizing behaviors – Behaviors which are directed externally toward the environment (e.g., aggression, kicking, hitting, spitting).

Academic concerns - Includes concerns such as functioning below expected level. Attendance concerns – Referral due to chronic absenteeism.

Bullied by others/bullying perpetrator - Select for person who is bullied -or- select for person who bullies. "Bullying is unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. The behavior is repeated, or has the potential to be repeated, over time." (Stopbullying.gov). It is a negative action when someone intentionally inflicts, or attempts to inflict, injury or discomfort upon another.

Policy Violation related to substance use - Per school policy, this category denotes a referral from administration or disciplinarians based on a substance use policy violation

Other policy violation - Self-explanatory.

Cutting self-harm - Self-explanatory.

Substance use concerns – Referred with concern regarding possible or known substance use, without school policy violation.

Physical health concerns – Referred due to notable changes or concerns in physical health.

Suicide ideation/gesture/attempt/crisis referral – Primary referral as a result of the school entity suicide prevention policy.

Re-entry to school from out of school placement – Referral is a result of student transitioning from an out of school placement back to school.

Social concern - Includes problems with interpersonal relationships with the exception of bullying concerns or other incoming referral reasons.

Other - Includes reasons not listed e.g. Other school policy violation; you will need to specify the reason in the space provided.

10. Did you gather data as part of this SAP referral?

This includes any behavioral data as collected as part of the SAP referral process. Observations can be formal or informal based on district policies and procedures. District determines who observations are conducted by and if consent is required. A 'Yes' response requires one or more selections of the following data types:

Behavioral checklist - Self-explanatory.

Observations - Self-explanatory.

Academic records - Self-explanatory.

Attendance records - Self-explanatory.

Disciplinary records - Self-explanatory.

11. Was Parent/Guardian Contact initiated?

Contact to parent/guardian was initiated through an electronic or mail service. If the answer is "No", then the SAP Process is discontinued and no further information is gathered on this student.

12. Was written permission obtained from Parent/Guardian to continue with the SAP process? School has received informed written consent from the parent/guardian for student in accordance with the Protection of Pupil Rights Amendment (PPRA).

13. If SAP process discontinued, indicate primary reason

Only indicate the primary reason for the process being discontinued.

Student no longer enrolled with LEA - Self-explanatory.

Parent refusal/written permission not obtained - If written parental permission is not obtained then the form must be ended here by selecting 'Written parental permission not Obtained'. If the student is legally emancipated then 'Written parental permission not obtained' is not a valid choice.

Parent refusal/written permission not obtained and student referred to community services/supports - Self-explanatory.

Parent refusal/written permission not obtained and student referred to other in-school services - Self-explanatory.

Student refusal - Student refused involvement in the SAP process either verbally or in writing. If student is legally emancipated then 'Parent refusal'' is not a valid choice.

SAP process was not appropriate - Self-explanatory.

Already in treatment - Please note - this is not necessarily a reason to discontinue Referral to outpatient services based in school - Self-explanatory. Please note - this is not necessarily a reason to discontinue

Other - Includes reasons not listed; you will need to specify the reason in the space provided.

13B). If SAP process was discontinued, what other school services were recommended (select all that apply) - Only answer if SAP process was discontinued. If you do not have any other school services recommended, select "No School Services Recommended."

IF YOU INDICATED A RESPONSE TO #13, STOP HERE. DO NOT COMPLETE THE REMAINDER OF THE FORM. If written parent permission is not obtained, the SAP Process is stopped and no further information is gathered on this student for this form.

 Did the SAP team create an action plan for this student? (Recommendations coordinated for this referral)? - An action plan is a written plan outlining actions needed to reach one or more set goals.

Were the identified goal(s) from the action plan met for this referral? - Self-explanatory.

16. Primary School Service Recommended by core team

Select a one primary service from the list of in-school services recommended by the core team.

Academic supports - Includes: tutoring, speech/language supports, Title I, etc. School team supports - Tiered teamed approach. Group intervention - Students dealing with similar issues that often impede academic success. Sessions are facilitated by an adult to assist and monitor the skill-building process (e.g. Skill building, support).

One-to-one counseling with school counselor and/or school psychologist - Facilitating the learning process to affect positive change in the student through counseling. This includes only counseling done by school personnel.

Services by/from school social worker - Self-explanatory.

One-to-one follow-up with team member or other school personnel – This follow-up can take place via a team member or other school personnel.

Alternative school placement - Alternative school placement: any school placement outside the regular school setting to include approved Alternative Education for Disruptive Youth (AEDY) programs.

Crisis intervention - Student was determined to be an imminent threat to self or others and was referred for a crisis evaluation/risk assessment.

Other school services - Includes any reasons not listed above.

No school services recommended - If you do not have a primary services recommended, select "No school services recommended."

17. Was the primary school service identified accessed? Self-explanatory.

18. Primary community service recommended by core team.

You must select a primary service from the list of in-school services recommended by the core team. If applicable, select any of the secondary services that apply. Note: If you do not have any secondary services recommended, you select "No community/agency services recommended".

Children and Youth - The county/agency entity that deals with issues related to children, youth, and families.

Continuing drug and alcohol treatment services - Student currently participating in drug and alcohol treatment service.

Continuing mental health treatment services - Student currently participating in mental health treatment service.

Other community/agency services - e.g. Big Brothers/Big Sisters, Easter Seals, and Juvenile Probation, etc.

Screening - A face-to-face interview between the referred student and SAP liaison. This interview is conducted at the school setting during regular school hours, unless otherwise indicated. The purpose of the interview is to gather information from the student related to school-based data as well as other identified areas of concern impacting student behavior. The screening determines the level of concern, and develops an action plan to include additional services, if necessary. This screening could also determine if a clinical assessment is needed for further evaluation.

Your school entity liaison agreement will determine which screening option you select below:

Screening by behavioral health SAP liaison (e.g., combined D&A and MH) - The county/agency representative for both drug and alcohol and mental health on your SAP team. See screening definition above.

Screening by drug and alcohol SAP liaison - The county/agency representative for drug and alcohol. See screening definition above.

Screening by mental health SAP liaison - The county/agency representative for mental health. See screening definition above.

Natural community supports - Natural supports are individuals and resources a family can access independent from formal services. Examples would include, but are not limited to January 9, 2024 community sports leagues, scouts, faith-based groups, community support groups, such as alanon as well as friends and family who are a support for the child. Natural supports can be shortterm or long-term and are usually sustainable and available to the child and family. **No community/agency services recommended** - If you do not have a community/agency or any secondary services recommended, select "No school services recommended."

19. Was the primary community service identified accessed? Self-explanatory.

RECOMMENDATION(S) FROM SCREENING (Select one Primary Service) Note: This question is only available if you select one of the 3 screening options from the list of community services from question 18.

Assessment - A face-to-face interview with the student and/or family conducted by a Drug/Alcohol or Mental Health professional. Typically, this assessment occurs in an agency, but in some counties may be conducted in the school setting. The purpose of the assessment is to determine the need for and/or level of care of treatment. The assessment may include, but not limited to, the following areas: psychosocial history; drug/alcohol and mental health history; medical, educational, recreational, family, sexual, and/or legal history; other agency/system involvement.

Behavioral health assessment - (i.e. combined D&A and MH) is completed by a dually certified clinician for both drug and alcohol and mental health. Drug and alcohol assessment - See definition above. Mental health assessment - See definition above. One-to-one with drug and alcohol liaison - Self-explanatory. One-to-one with mental health liaison - Self-explanatory. Other social service community agencies - (e.g. Children and Youth and Family Services.) Group intervention - Self-explanatory. No Recommendation - Self-explanatory. Information Not Available - Self-explanatory. Screening did not occur - In the instance a recommended screening did not occur, select this item.

21. Please select how each item below influenced the desired outcomes for the student -Please answer all items below with a focus on the current referral. If an area below was not addressed during this referral, please choose a response of "Don't Know".

Note. Adapted from "Instructions for Completing the 2023-2024 PDE 4092" by the Pennsylvania

Network for Student Assistance Services, 2024c, Pennsylvania Department of Education, pp. 1-5

(https://www.safeschools.pa.gov/BlankReports/2023-

2024/Instructions for completing the 2023 24 PDE 4092.pdf).

FACTORS THAT PREDICT ACCESS TO SAP RECOMMENDATIONS

Appendix C

PA SAP State Summary Data for the 2023-2024 School Year

SAP 2023-2024 State Summary

Month of Referral

Gender

Male

Yes

No

Female

Non-binary/Other Gender

Incoming Referral Source

Administrative, Non Disciplinarian

School Mental Health Professionals

Parent/Guardian/Other family member

Threat assessment

Special Education

Disciplinarian Instructional Staff

Peer

Self Other

Non Instructional Staff

School Based Team(s)

Safe2Say Something

Tiered

September	17445
October	15996
November	11941
December	7999
January	9972
February	10534
March	7894
April	6525
May	3255
June	285
July	69
August	2934

TOTAL SAP CASES - 94849

Race/Ethnicity

American Indian/Alaskan Native	408
Asian	1396
Black/African American	14658
Hispanic	13767
Multi-Racial	7153
Native Hawaiian or other Pacific Islander	257
White	57210

Grade

50028

44201

29897 64951

5451

23415 10242

29046

10330

9525

1599

1507

92

388

274 2718

1860

620

PreK Half Day	8
PreK Full Day	35
K4 Half Day	29
K4 Full Day	238
K5 Half Day	216
K5 Full Day	3948
1st Grade	4761
2nd Grade	5294
3rd Grade	4851
4th Grade	5334
5th Grade	6614
6th Grade	8056
7th Grade	9571
8th Grade	9705
9th Grade	12100
10th Grade	10150
11th Grade	8206
12th Grade	5731

Legally Emancipated

Yes	158
No	94690

Statewide

Primary Incoming Referral Reason	Primary Reason
Internalizing behaviors	17198
Externalizing behaviors	23608
Academic concerns	9289
Attendance	6553
Bullying by others/bullying perpetrator	1227
Policy violation related to substance use	4988
Other policy violation	2582
Substance use	3069
Cutting - self harm	916
Physical health concerns	954
Suicide ideation/gesture/attempt/crisis referral	3640
Re-entry to school from out of school placement	542
Social Concern	7771
Other	12511

If the SAP process was discontinued, were other Reason SAP process was discontinued school services recommended?

Academic supports	9175
School team supports	6992
Group intervention	4393
One-to-one counseling	12167
Services by/from school social worker	5571
One-to-one follow-up	12379
Alternative school placement	1725
Crisis intervention	1291
Other school services	4461
No school services recommended	11348
Was a SAP behavior checklist utilized?	
Was a SAP behavior checklist utilized?	68363
	68363 26483
Yes	
Yes No	
Yes No Type of data collected	26483
Yes No Type of data collected Behavioral checklist	26483 42790
Yes No Type of data collected Behavioral checklist Observations	26483 42790 46691

Parent refusal/Written permission not obtained and student referred to other community services/supports	2361
Parent refusal/Written permission not obtained and student referred to other in-school services	6060
Student refusal	3194
Other	4348
Parent refusal/Written permission not obtained	15945
Student no longer enrolled with LEA	4050
SAP process was not appropriate	4364
Already in treatment	2828
Referral to outpatient services based in school	1868

Was parent/guardian contact initiated?

Yes	88307
No	6382
NA/Emancipated	158

Was written permission obtained from parent/guardian for the SAP process?

Yes	57568
No	37120
NA/Emancipated	158

Primary school service recommended by core team

	Primary Service
Academic Supports (e.g., tutoring, speechlanguage supports, Title I, etc.)	4465
School Team Supports (e.g., MTSS)	3900
One-to-One Counseling with School Counselor and/or School Psychologist	9082
Group Intervention (e.g. Skill building, support)	10010
Services by/from School Social Worker	3890
One-to-One Follow-Up with Team Member or Other School Personnel	8973
Alternative School Placement	846
Crisis Intervention	736
Other School Services	3590
No School Services Recommended	4338

Was the primary school service identified accessed?

Yes	43624
No	1862
No Primary School Services Recommended	4344

Primary community community service(s) recommended by core

3am	Primary Service
Children and Youth	752
Continuing Drug and Alcohol Treatment Services	571
Continuing Mental Health Treatment Services	6409
Other Community/Agency Services	4334
Screening by Behavioral Health SAP Liaison	8535
Screening by Mental Health SAP Liaison	9874
Screening by Drug and Alcohol SAP Liaison	1836
No Community/Agency Services Recommended	15331
Natural Community Supports	2187

Was the primary community service identified accessed?

Yes	31112
No	3384
No Primary Community Services Recommended	15332

Primary recommendation(s) from screening	Primary Recommendation
Behavioral Health Assessment	2733
Drug and Alcohol Assessment	919
Mental Health Assessment	6117
One-to-One ATOD with Drug and Alcohol Liaison	888
One-to-One with Mental Health Liaison	4540
Other Social Service Community Agencies	1274
Group Intervention (e.g. Skill building, support)	1706
No Recommendation	567
Information not available	398
Screening Did Not Occur	1101
Were one or more of the above school and/or community recommedations coordinated through an intervention plan for this referral?	
Yes	38797
No	11033
Were the identified goal(s) from the intervention plan met for this referral?	
Yes	27960
Somewhat	9234

No

Referral outcome influences	Contributed	Impeded	No Effect	Don't Know
Parent participation	39742	4829	3200	2056
Access to agency/liaison service(s)	33892	1266	11533	3136
Transportation to access primary recommended out of school service(s)	10221	1688	29885	8033
Insurance to access primary recommended out of school service(s)	12207	1704	26671	9244
Access to school support personnel and/or behavioral support personnel	40845	333	5436	3213
Other	1318	472	N/A	N/A

2838

Note. From "SAP Referral Reports: SAP 2023-2024 State Summary" by the Pennsylvania

Department of Education, n.d.-c (https://www.safeschools.pa.gov/SAP/Reports.aspx).

Appendix D

PA SAP TASD Summary Data for the 2023-2024 School Year

SAP 2023-2024 District Summary

Month of Referral

-

September	9
October	11
November	17
December	11
January	6
February	11
March	14
April	12
May	7
June	0
July	0
August	0

Gender

Male	48
Female	50
Non-binary/Other Gender	0

Special Education

Yes	24
No	74

Incoming Referral Source

Administrative, Non Disciplinarian	0
School Mental Health Professionals	0
Disciplinarian	8
Instructional Staff	60
Non Instructional Staff	11
Parent/Guardian/Other family member	4
School Based Team(s)	0
Tiered	0
Threat assessment	0
Peer	12
Safe2Say Something	2
Self	0
Other	1

Tunkhannock Area SD

TOTAL SAP CASES - 98

Race/Ethnicity

American Indian/Alaskan Native	0
Asian	0
Black/African American	1
Hispanic	0
Multi-Racial	3
Native Hawaiian or other Pacific Islander	1
White	93

Grade

	-
PreK Half Day	0
PreK Full Day	0
K4 Half Day	0
K4 Full Day	0
K5 Half Day	0
K5 Full Day	1
1st Grade	3
2nd Grade	3
3rd Grade	1
4th Grade	0
5th Grade	4
6th Grade	7
7th Grade	4
8th Grade	18
9th Grade	15
10th Grade	22
11th Grade	11
12th Grade	9

Legally Emancipated

Yes	0
No	98

FACTORS THAT PREDICT ACCESS TO SAP RECOMMENDATIONS

Primary Incoming Referral Reason	Primary Reason
Internalizing behaviors	4
Externalizing behaviors	32
Academic concerns	21
Attendance	1
Bullying by others/bullying perpetrator	0
Policy violation related to substance use	6
Other policy violation	0
Substance use	10
Cutting - self harm	1
Physical health concerns	3
Suicide ideation/gesture/attempt/crisis referral	4
Re-entry to school from out of school placement	0
Social Concern	8
Other	8

If the SAP process was discontinued, were other school services recommended?

Academic supports	7
School team supports	0
Group intervention	0
One-to-one counseling	2
Services by/from school social worker	3
One-to-one follow-up	2
Alternative school placement	0
Crisis intervention	2
Other school services	4
No school services recommended	31

Was a SAP behavior checklist utilized?

Yes	70
No	28

Type of data collected

Behavioral checklist	34
Observations	65
Academic records	62
Attendance records	41
Disciplinary records	38

Reason SAP process was discontinued

Parent refusal/Written permission not obtained and student referred to other community services/supports	0
Parent refusal/Written permission not obtained and student referred to other in-school services	3
Student refusal	6
Other	0
Parent refusal/Written permission not obtained	26
Student no longer enrolled with LEA	3
SAP process was not appropriate	2
Already in treatment	7
Referral to outpatient services based in school	2

Was parent/guardian contact initiated?

Yes	95
No	3
NA/Emancipated	0

Was written permission obtained from parent/guardian for the SAP process?

Yes	63
No	35
NA/Emancipated	0

Primary school service recommended by core team

	Primary Service
Academic Supports (e.g., tutoring, speechlanguage supports, Title I, etc.)	5
School Team Supports (e.g., MTSS)	1
One-to-One Counseling with School Counselor and/or School Psychologist	1
Group Intervention (e.g. Skill building, support)	3
Services by/from School Social Worker	3
One-to-One Follow-Up with Team Member or Other School Personnel	1
Alternative School Placement	0
Crisis Intervention	0
Other School Services	24
No School Services Recommended	11

Was the primary school service identified

accessed?	
Yes	34
No	4
No Primary School Services Recommended	11

Primary community community service(s) recommended by core team

eam	Primary Servic
Children and Youth	1
Continuing Drug and Alcohol Treatment Services	1
Continuing Mental Health Treatment Services	5
Other Community/Agency Services	3
Screening by Behavioral Health SAP Liaison	1
Screening by Mental Health SAP Liaison	6
Screening by Drug and Alcohol SAP Liaison	7
No Community/Agency Services Recommended	24
Natural Community Supports	1

Yes	22
No	3
No Primary Community Services Recommended	24

Primary recommendation(s) from screening	Primary Recommendation
Behavioral Health Assessment	0
Drug and Alcohol Assessment	2
Mental Health Assessment	1
One-to-One ATOD with Drug and Alcohol Liaison	6
One-to-One with Mental Health Liaison	2
Other Social Service Community Agencies	0
Group Intervention (e.g. Skill building, support)	0
No Recommendation	0
Information not available	1
Screening Did Not Occur	2
Were one or more of the above school and/or community recommedations coordinated through an intervention plan for this referral?	
Yes	47

Were the identified goal(s) from the intervention plan referral?	met for this
Yes	
Somewhat	
No	

No

Referral outcome influences	Contributed	Impeded	No Effect	Don't Know
Parent participation	47	2	0	0
Access to agency/liaison service(s)	41	0	6	2
Transportation to access primary recommended out of school service(s)	10	1	36	2
Insurance to access primary recommended out of school service(s)	12	0	35	2
Access to school support personnel and/or behavioral support personnel	44	0	4	1
Other	0	0	N/A	N/A

Note. From "SAP Referral Reports: SAP 2023-2024 District Summary Tunkhannock Area SD"

by the Pennsylvania Department of Education, n.d.-b

(https://www.safeschools.pa.gov/SAP/Reports.aspx).

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