

MENTAL HEALTH SUPPORTS AND STUDENTS ON HOME INSTRUCTION  
FOR REASONS OF ANXIETY, DEPRESSION OR SCHOOL PHOBIA

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## **Abstract**

While there is significant research on the treatment of mental illness in children and adolescents in clinical and therapeutic settings, less has been written on the efficacy of providing treatment within the school setting. Specifically, there is little research on the effectiveness of interventions for students who do not attend school due to anxiety, depression, or school phobia. The essential question yet to be answered was “What is the relationship, if any, between mental health supports in schools and the rate at which students are on home instruction?” Exploring this question adds to the body of knowledge on the school-based mental health supports for this population of students. This study examined the mental health supports available to students in a sample of New York State suburban schools. The results indicated that there is a relationship between nine of the 57 mental health supports and the percentage of students placed on home instruction due to anxiety, depression, or school phobia. Districts need to know what supports may be effective and what supports may not be appropriate for this population and make decisions based on what is known to be effective.

Keywords: mental illness in children, anxiety, school phobia, depression, school based mental health, learner supports, social worker

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## Chapter 1: Introduction

The prevalence of mental illness in children and young adults is astounding. *Mental health: A report of the Surgeon General* (1999) reported “One in five children and adolescents experience signs and symptoms of a DSM-IV disorder during the course of a year” (United States Department of Health and Human Services [US HHS], p. 193). These disorders presented primarily as anxiety (13%), disruptive disorders (10.3%), and mood disorders (6.2%) (US HHS, 1999). These are lifetime issues that impact communities, schools and, most critically, the families and their mentally ill children. Only a fraction of these students receives treatment (Adelman & Taylor, 1998; Campisi, 2010; President’s New Freedom Commission on Mental Health [PNFCMH], 2003; Ringeisen, Henderson, & Hoagwood, 2003; US HHS, 1999; US HHS Office of the Surgeon General [OSG], 2000; Weist, 2005). To school district leaders, teachers and families, the following scenarios describe the some of the commonly observed symptoms that students with mental illness present in the classroom.

Sam is a 10 year old fourth grader who is increasingly anxious. He has difficulty sleeping and often has graphic nightmares about death and separation. On family outings, he expresses unrealistic fears about possible traffic accidents that could result in the death of his family and is constantly scanning his environment for danger. He worries about being kidnapped. He makes frequent visits to the nurse’s office, where he complains of stomach pain. He calls his father to come and pick him up at school several times a week. Getting Sam to school is becoming increasingly difficult with the result being prolonged screaming, defiance and threats of self-harm. During this year’s State assessments, he experienced uncontrollable diarrhea in the classroom. His anxiety is overwhelming his life and that of his family.

David is 14 and has deepening feelings of sadness and hopelessness. This year, he stopped participating in his favorite sports, seeing his friends, and is increasingly angry and acting out at home with his parents and sister. He is receiving disciplinary notices more frequently in school for the last six months and has not attended the in-school suspensions required for the disciplinary issues. The assistant principal believes that David is a student with a conduct disorder who needs to face increasing levels of discipline. His family is divided on what the issue really is for David. He is self-medicating with marijuana and alcohol. He leaves his home in the middle of the night after a fight with his girlfriend and is arrested by the police for vandalism at the school. When released from the police station, David jumps from his father's car and runs into the woods. The police find him as he is preparing to hang himself in the backyard of his girlfriend's house.

Ann is 11 years old and a fifth-grade student, who each and every morning begins her day with tantrums before the school bus arrives. She takes her clothes off and is repeatedly redressed by her mother. The school bus leaves without her, and the fight begins for her mother to get her into the car. She screams obscenities on the 10-minute ride to school. The social worker meets the car and tries to persuade her to come into school. After an hour, Ann goes home with her mother.

Since the 1999 *Mental health report: A report of the Surgeon General*, little has changed either in the prevention or treatment of mental illnesses that affect children (US HHS, 1999). If no treatment occurs “these childhood disorders may persist and lead to a downward spiral of school failure, poor employment opportunities, and poverty in adulthood” (PNFCMH, 2003, p. 2). In its’ final report, the President’s New Freedom Commission on Mental Health [PNFCMH] (2003) declared that “the mental health delivery system is fragmented and in disarray ...

lead[ing] to unnecessary and costly disability, homelessness, school failure and incarceration” (p. 4).

School is where a child with a mental illness first comes into contact with larger peer groups and adults who expect attention and the achievement of a wide range of skills (Zhang & Feller, 2007). School is a child’s work, and attention to this work suffers when a child is distracted with a mental illness. This is where a mental illness begins to separate the child from peers and the learning process and from treatment.

Intervention is critical and treatment must be provided early (Zhang & Feller, 2007). “As few as one-sixth or one-third of youth with diagnosable disorders receive any treatment and, of those who do, less than half receive adequate treatment” (Paternite, 2005, p. 657). “As early as 1969, the Joint Commission on Mental Health of Children concluded that only a fraction of the children in need were actually receiving mental health services and that the services being provided were largely ineffective” (Stroul, Blau, & Sondheimer, 2008, p. 3).

The question of where children receive mental health services is best answered by Ringeisen et al. (2003), when they discuss the critical role in the delivery of children’s mental health services. Exactly how critical a role is substantiated by their research and that of Burns et al. (1995), in that “seventy percent to 80% of children who receive *any* mental health services receive them in school” (p. 154). Burns et al. describe schools as the *de facto* mental health service delivery system for children and adolescents (1995). Being the *de facto* system means that, while schools have become the primary source of treatment, they are most likely not to be prepared in a systemic way to deliver, evaluate and, most importantly, finance these services.

Within the larger population of mental health disorders in children and adolescents, anxiety, depression and school phobia are growing concerns among educators and communities.

These have long-term effects on the lives of the students, including school failure, joblessness, drug use and crime. These students account for almost 25% of the students with mental illness in our schools. It is this issue that prompted this research study and, in particular, this researcher's interest in the specific disorders of anxiety, depression, and school phobia for children and adolescents and the effects of these mental health disorders on students placed on home instruction.

### **Purpose Statement**

This quantitative study was designed to investigate the relationship between the availability of mental health supports provided for students in a sample of New York State (NYS) suburban schools and the rates at which students are provided home instruction for reasons of anxiety, depression or school phobia.

### **Research Problem**

What has not been studied to any great degree is the availability and relationship of specific school supports for students with mental illness and, of more interest to this researcher, the effectiveness of school supports for students placed on home instruction in suburban schools because of anxiety, depression, or school phobia. Specifically, what are the types of supports that can impact their attendance in school – the place where instruction happens most effectively and support services are most effectively delivered.

The essential question yet to be answered is “What is the relationship, if any, between mental health supports in schools and the rate at which students are on home instruction?” Exploring this question will add to the body of knowledge on school-based mental health supports for this population of students. It will provide recommendations for specific supports that should be considered by districts for these students.

## **Research Questions**

This quantitative study was designed to answer the following questions regarding mental health supports for students in NYS suburban schools:

1. What are the types of mental health supports available in suburban schools in NYS?
2. What is the percentage of students placed on home instruction due to anxiety, depression, or school phobia?
3. Is there a relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?
4. Is there a relationship between the types of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?

## **Definitions of Terms**

To ensure a common understanding of mental illness and mental health supports described in this study, clear definitions are provided for each of the terms used in this study.

*Anxiety Disorders* – Anxiety disorders are the most prevalent of childhood mental disorders, and these children and adolescents “experience intense fear, worry or uneasiness that can last for long periods of time” (US HHS Substance Abuse and Mental Health Services Administration [SAMHSA], 2003, para. 1).

*Character Education* – The Character Education Partnership (2010) defines character education as:

An educational movement that supports the social, emotional and ethical development of students. It is the proactive effort by schools, districts, and states to help students develop important core, ethical and performance values such as caring, honesty, diligence, fairness, fortitude, responsibility, and respect for self

and others. Character education teaches students how to be their best selves and how to do their best work while also facilitating positive school culture and climate transformation. (para. 1)

*Child Study Team (CST)/Pupil Services Team (PST)* – CSTs and PSTs are multi-disciplinary teams comprised of building level staff. These teams consider students having difficulties in the educational environment. The difficulties may be behavioral, social, emotional, or related to learning. The teams consider the needs of the individual student and provide accommodations or services that will help the student be successful in school.

*Generalized Anxiety Disorder (GAD)* – GAD is defined as:

...a pattern of excessive worry on most days for a period of 6 months. This worry is difficult to control. In clinical settings, GAD virtually never presents as an isolated condition but is complicated by another co-morbid disorder. Beyond the relationship with other anxiety disorders, GAD shows an unusually strong association with major depression. (Evans et al., 2005, p. 166)

*Home Instruction* – Home instruction is defined by New York State (NYS) law and Commissioner of Education Regulations, which state that instruction is to be provided for students by an appropriately certified teacher for a minimum of five hour per week for elementary students and ten hours a week for secondary students.

*Major Depressive Disorder* – Major depressive disorder is defined by Evans, et al. (2005) as an individual who, during the same two-week period, reports that five or more of the following symptoms are present nearly every day:

- Depressed or irritable mood most of the day

- Markedly diminished interest or pleasure in almost all activities, most of the day
- Significant weight loss or gain, or change in appetite; failure to gain expected weight
- Sleep disturbance
- Psychomotor agitation or retardation
- Fatigue or loss of energy
- Feelings of inappropriate guilt or hopelessness
- Indecisiveness or diminished ability to concentrate
- Recurrent thoughts of death or suicidal ideation, suicide attempts. (Evans, et al., 2005, p. 5)

*Mental Health Supports and Interventions* – There are a wide range of mental health supports and interventions available in school districts. For the purposes of this research, three levels were used to categorize them: Level 1, Primary Prevention Supports, consists mostly of supports for all students; Level 2, early intervention supports, consists of both supports and early interventions for students who are at risk; Level 3, Interventions for Chronic or Severe Problems, consists mainly of individualized, intensive interventions for students with serious problems.

*Level 1, Primary Prevention Supports* – These supports are designed to be available for all students within a district. They may be embedded within the instructional framework (e.g., general health education, character education), key components to developing or sustaining a positive school climate (e.g., Positive Behavior Intervention Supports [PBIS], peer mentoring, drug and alcohol education), or

adjunct programs that assist students and families outside the instructional day (e.g., before or after school care, homework programs).

*Level 2, Early Intervention Supports* – For the purposes of this analysis, early prevention is defined as selective or targeted interventions (Kutash, Duchnowski, & Lynn, 2006). Kutash, et al. (2006) further define selective or targeted interventions as being “used with students who require more than universal strategies but less than intensive individualized interventions” (p. 11).

*Level 3, Interventions for Chronic or Severe Problems* – For the purposes of this analysis, this level is defined as an intensive individualized intervention (Kutash et al., 2006). This level of intervention is used “when problem behaviors are dangerous, highly disruptive, and may result in social or educational exclusion” (Kutash et al., 2006, p. 11).

*Mobile Crisis Team* – In NYS, a mobile crisis team is an interdisciplinary team of mental health professionals (e.g., nurses, social workers, psychiatrists, psychologists, mental health technicians, addiction specialists, peer counselors that are housed in county mental health agencies. Mobile crisis teams, in the context of this study, respond to schools, upon request, when students are at risk of harming themselves or others and require immediate intensive mental health interventions.

*Positive Behavior Intervention Supports (PBIS)*. PBIS is a “decision making framework that guides selection, integration, and implementation of the best evidence-based academic and behavioral practices for improving important academic and behavior outcomes for all students” (OSEP Technical Assistance Center on PBIS, 2009, p. 1).



*Positive Behavior Plan* – A behavioral intervention plan supports an individual student in changing behavior, acquiring and using new alternative skills, decreasing problem behavior, and facilitating general improvements in the quality of life of the individual, his or her family, and the instructional team in a school (OSEP Technical Assistance Center on PBIS, 2009).

*School Phobia* – School phobia is a mental illness that “is simply defined as anxiety and fear associated with going to school that challenges the resources of the school” (Tyrrell, 2005, p. 147).

### **Significance of Study**

This study will provide school district leaders with information on the mental health supports that have a relationship to the percent of students placed on home instruction for reasons of anxiety, depression or school phobia. In these times of fiscal distress for school districts, this study will provide information to these leaders on the impact of specific supports for this population of students with mental illness and allow these leaders to make more informed decisions about the supports that, if eliminated, will affect this population.

### **Limitations**

A sample size of 30 suburban school districts was projected for the analysis; however, the sample was ultimately limited to 17 (57%) because there were significant challenges in securing the participation of districts in the study. Superintendents of districts indicated that the time of the year, the month before the communities voted on school budgets, made participation difficult since staffs were consumed with the fiscal issues in the districts. In addition, a number of superintendents indicated they were reluctant to participate in a study that examined mental health supports in schools. They stated that, even though their participation was confidential,

there would be knowledge within district staff of the survey and the district's response.

Comments included the following: *“Given this incredibly difficult school year fiscally, I cannot commit to responding given that the budget vote is only a month away. We are already planning in case of a ‘no’ vote.”* and *“Looking at mental health supports or services right now could commit the district to allocating resources we don’t have.”*

### **Organization of Study**

This study is divided into five chapters. Chapter 1 provides an introduction to the study, including the purpose of the study, definition of terms used in the study, the research questions that will be answered, the significance of the study, and this section, the organization of the study. Chapter 2 provides a review of the literature on mental health issues for students and summarizes the current research on the problem addressed by this research. Chapter 3 provides the methodology used in the study, including the participants, sample size, instrumentation, design, data collection, validity, variables, and statistical approaches used in the analysis of the data. Chapter 4 discusses the results of the data analysis as it relates to each of the questions posed in this research. Chapter 5 is a summary of findings, conclusions, and recommendations.

## **Chapter 2: Literature Review**

The prevalence of mental illness in children and young adults is astounding. As discussed in Chapter 1, one in five students are affected and only a fraction receives treatment (Adelman & Taylor, 1998; Campisi, 2010; PNFCMH, 2003; Ringeisen et al., 2003; USDHHS, 1999; USDHHS OSG, 2000; Weist, 2005). The cost in suffering, damaged lives, and relationships is staggering. While there is significant research on the treatment of mental illness in children and adolescents in clinical and therapeutic settings, less has been written on the efficacy of providing treatment within the school setting. This is concerning, given that the majority of children who do receive mental health services do so within the educational system. “As few as one-sixth or one-third of youth with diagnosable disorders receive any treatment” (Paternite, 2005, p. 657). For the small percentage of youth who do receive service, most actually receive it in a school setting (Paternite, 2005).

Specifically, there is little research on the effectiveness on the subgroup of these students who do not attend school due to anxiety, depression, or school phobia. These students are often placed on home instruction, where instruction is provided for up to one to two hours a day. Since many parents work, these children and youth are frequently unsupervised and often engage in high-risk behaviors that can complicate their recovery and lives. Treatment for these students requires consistent therapeutic intervention, and as the research acknowledges, only a fraction receive treatment unless they receive it in school – the very place they avoid. It is this population of students that provides the basis of this research study.

### **Impact of Mental Illness on Families**

Families of children with mental illness pay equally in the pain and suffering with their children. Siblings live their lives in a family often beset by crises that follow one another

unpredictably over the years. The center of attention in the family is the child with the mental illness. Busch and Barry (2007) found, in fact, that the burden of caring for a child with a mental illness places more stress on families than does that of other disabilities:

We found that caring for a child with mental health care needs affects financial well-being more than caring for a child with other special health care needs. Parents of a child with mental health disorders are also more likely than other parents to cut work hours, to quit work, and to spend more time arranging their child's care. (p. 1088)

Busch and Barry (2007) hypothesize that there are many reasons why this stress of mental illness is severe for families. First and foremost, mental illness is viewed as a stigma, and therefore families may be reluctant to seek treatment. Treatment is expensive, especially when you consider the medication that is often prescribed, the number of physician or therapist visits the child requires, unexpected hospitalizations when a crisis occurs and, perhaps most importantly, because “those with behavioral disorders accrue greater total costs for office-based visits and prescriptions medications – the services least likely to be fully covered by private health insurance” (Busch & Barry, 2007, p. 1088).

The advocacy of parents of children with mental illness resulted in legislative reform in NYS. In 2006, NY passed *Timothy's Law* (2007), which was an attempt to ensure that children with mental illness were provided parity in their mental health benefits through insurance companies. The impetus was the suicide of a 10-year-old boy, who has suffered with severe bouts of depression and whose insurance would not reimburse the parents for mental health treatment.

## **Schools and Children and Adolescents with Mental Illness**

Mental illness in children and adolescents is a national concern in both the health and educational communities. School is where a child with a mental illness first comes into contact with larger peer groups and adults who expect attention and achievement of a wide range of skills. School is a child's work, and attention to this work suffers when a child is distracted with a mental illness. This is where a mental illness begins to separate the child from peers, from the learning process, and from treatment. Intervention is critical, and treatment must be provided early (Zhang & Feller, 2007).

Children are more likely to receive mental health supports in schools than in the community for a number of reasons, with accessibility being the first and foremost reason (Catron & Weiss, 1994). By law, children are required to attend school for most of their early lives. Schools are the constant in the daily experiences and lives of children and, therefore, are "well-positioned to address daily the problems of children who are seriously at risk for a wide variety of poor educational and mental health outcomes" (Doll & Lyon, 1998, p. 359). "For those students who are at greatest risk...schools may represent one of the most potentially protective environments, encouraging the development of good problem-solving and academic skills, individual talents and other productive activities, and social competence" (Doll & Lyon, 1998, p. 357). They are one of the primary settings in which children and youth have opportunities to build and sustain the resilience that is critical to successful treatment for their mental illness (Doll & Lyon, 1998).

The question of where children and youth currently receive mental services is answered in the research of Ringeisen et al. (2003). They state "schools play a critical role in the delivery

of children’s mental health services” (p. 154). Exactly how critical a role is substantiated by their research and that of Burns et al. (1995) in that “seventy percent to 80% of children who receive *any* [emphasis added] mental health services receive them *in school* [emphasis added]” (p. 155). Burns et al. (1995) cite schools as the de facto mental health service delivery system for children and adolescents. By default, the educational system has assumed the role of primary service provider for the vast majority of mentally ill students (Burns et al., 1995). Schools are most likely not prepared in a systemic way to deliver, evaluate, and most importantly, finance these services. While there is significant research on the treatment of mental illness in children and adolescents in clinical and therapeutic settings, less has been written on the efficacy of providing treatment within the school setting.

**Allocating resources for mental health supports in schools.** As the external political and fiscal forces increase, the ability of school districts to provide for the educational needs of their students with the resources they have available has become more difficult to initiate, manage, and conclude in meaningful results for these students. Districts focus on the moving targets of educational outcomes evaluated by increasing student assessments. At the same time, districts and administrators are specifically faced with the challenge of addressing the mental health needs of almost 20% of their students. Adelman and Taylor (2006a) summarize the conundrum in which schools find themselves when they quote Kohn (1999):

Consider the American penchant for ignoring the structural causes of problems. We prefer the simplicity and satisfaction of holding individuals responsible for whatever happens: crime, poverty, school failure, what have you. Thus, even when one high school crisis is followed by another, we concentrate on the particular people involved – their values, their character, their personal failings – rather than asking whether something about the system

in which these students find themselves might also need to be addressed. (p. 1)

If the relationship between mental illness and achievement is understood, the discussion must focus next on what mental health supports should be available and how their effectiveness will be measured (Pluymert, 2000). Since we now know that the vast majority of students who do receive mental health services do so in schools, the next essential question is how best are these services designed and implemented in school settings (Kutash et al., 2006)?

**Mental health supports in schools – What exists now.** A 2005 study of 1,400 schools was conducted as part of the Annenberg Foundation Trust at Sunnyland’s Initiative on Adolescent Mental Health and reported on by Evans et al. (2005), provide insight into the issues facing students in public schools, particularly those with middle or high school students.

Respondents rated the severity of problems in their schools:

- 60% rated adolescent depression is one of the more serious problems;
- 43% rated anxiety as a struggle for students;
- 66% rated bullying is at least a moderate problem;
- 55% rated illegal drug use is at least a moderate problem; and
- 60% said that truancy is at least a moderate problem. (Evans et al., 2005, p. 602)

**Barriers to providing mental health supports in schools.** While this information may be startling, “only 53% of the schools have full-time access to a mental health professional - psychologist, counselor, social worker - whose main job is to deal with student’s mental health issues” (Evans et al., 2005, p. 610). Similarly, only slightly more than half of the schools had full-time nurses on staff (Evans et al., 2005). The barriers to treatment for students cited by schools were inadequate insurance coverage (85%) and the availability of treatment providers in

the community (46%). Therefore, many students did not receive treatment and the schools became the *de facto* system for treatment (Evans et al., 2005).

The US HHS Centers for Disease Control (CDC) conducted a survey periodically to assess school health policies and programs at the state, district, and classroom levels (Kann, Telljohann, & Wooley, 2007). Table 1 provides national information on the types of mental health and social service supports available for students in schools and available, but not on school property. Schools and mental health providers have not collaborated on services for mentally ill students. Private providers and schools deliver mental health services “in a parallel fashion with each other or do not operate effectively in either system” (Kutash et al., 2006, p. 70).

It is clear that there is a gap between the mental health behaviors and disorders that 20% of students bring to school every day and the resources districts allocate to remove these barriers to learning. The question may well be “whose responsibility is it to provide the supports that will enable these barriers to be removed?” Since students are in school for 185 days a year for 13 years, who else is better situated to do the work? Finally, schools already commit significant resources to these issues, so how can they invest wisely in the supports and services that are most effective? These are the questions that will drive the conversation and the political agenda for the foreseeable future, disconcerting though it may be that this is happening at a time when resources are dwindling.

The dilemma for school districts is that, as the number of consumers of this *de facto* system grows, the greater the financial pressure on already fragile educational systems increases. Resources are increasingly allocated to school reform and assessment. “If students’ psychological needs are a legitimate educational concern, to what extent is it the school’s duty to



address these needs through the allocation of human and financial resources” (Campisi, 2010, p. 3)?

Table 1

*Percentage of Schools Offering Specific Types of Mental Health, Social, and Preventive Services, by Location*

Type of Service	Location	
	On School Property	Not on School Property
Alcohol- or other drug-use treatment	53.8%	34.9%
Counseling for emotional or behavioral disorders (e.g., anxiety, depression, or attention deficit hyperactivity disorder [ADHD])	86.2%	37.5%
Crisis intervention for personal problems	95.4%	36.3%
Identification of emotional or behavioral disorders	81.7%	34.9%
Identification of or referral for physical, sexual, or emotional abuse	93.8%	37.1%
Identification of or referral for students with family problems	94.0%	37.2%
Referrals for after-school programs	60.0%	23.9%
<i>Prevention Service in 1-on-1 or Small-Group Sessions</i>		
Alcohol- or other drug-use prevention	73.0%	30.7%
Injury prevention and safety counseling	60.9%	21.2%
Suicide prevention	82.6%	29.5%
Violence prevention	90.7%	30.9%
Case management for students with emotional or behavioral problems	83.7%	33.8%
Comprehensive assessment or intake evaluation	65.1%	34.7%
Family counseling	49.7%	32.4%
Group counseling	78.6%	30.9%
Individual counseling	92.9%	37.2%
Peer counseling or mediation	67.9%	20.4%
Self-help or support groups	64.4%	28.4%

*Note:* School Health Policies and Programs Study (SHPPS) is a national survey periodically conducted to assess school health policies and programs at the state, district, school, and classroom levels. Comprehensive results from SHPPS 2006 are published in the *Journal of School Health*, 77(8), October 2007. Adapted from “Health Education: Results from the School Health Policies and Programs Study 2006” by L. Kann, S. K. Telljohann, and S. F. Wooley, 2007, *Journal of School Health*, 77(8), p. 418.

## **Mental Health Disorders**

**Anxiety disorders.** Anxiety disorders are the most prevalent of childhood mental disorders. Evans et al. (2005) describe three distinct anxiety disorders that, when looked at from a behavioral perspective, include some degree of long term school absenteeism. Anxiety can be generalized or, in a more severe form, present as separation anxiety. These children and adolescents “experience intense fear, worry, or uneasiness that can last for long periods of time” (US HHS SAMHSA, 2003, para. 1).

Anxiety may also be linked to depression and somatic complaints and result in difficulty for the child to separate from the parent and attend school. These children are at high risk for school attendance problems and frequently are the students who are placed on home instruction. Staying at home with only minimal contact with teachers and peers may exacerbate the child’s fears, sense of loneliness and isolation, and depression.

### **Childhood and adolescent depression.**

“For young people 15-24 years old suicide is currently the third leading cause of death, exceeded only by unintentional injury and homicide. More teenagers and young adults die from suicide than from cancer, heart disease, AIDS, birth defects, stroke pneumonia and influenza and chronic lung disease combined” (US HHS US Public Health Service [PHS], 1999, p. 3). In an analysis of data from *the 1997 National Longitudinal Survey of Youth*, Macomber (2009) reported the following outcomes for youth with depression: “They engage in more risk behaviors during adolescence...Specifically, they are more likely to use marijuana and have sex by age 16; and use other drugs, get into a fight, steal, and run away from home by age 18” (p. 1).

School districts across the country participate in the *Youth Risk Behavior Surveillance Survey* (YRBSS) conducted by the Centers for Disease Control (CDC) biannually in middle and

high schools nationwide since 1991 (US HHS CDC, 2011). The data analysis reports national and state results. Based on the 2009 data from a national sample of 9<sup>th</sup> through 12<sup>th</sup> graders, one out of ten students reported having made a plan about how they would commit suicide, and 6% reported having made at least one attempt during the previous year (US HHS CDC, 2011). One out of four students reported feeling so sad and hopeless over a two-week period that they gave up their usual activities. Students who experienced a major depressive episode in the last year were at more than twice the risk of using alcohol or illicit drugs (US HHS SAMHSA Center for Behavioral Health Statistics and Quality [CBHSQ], 2011). Results for NYS are similar and are summarized in Table 2.

Table 2

*Youth Risk Behavior Survey (YRBS) New York Results for 2009*

Question	% Responding Yes	
	During the 30 Days Before the Survey	During the 12 Months Before the Survey
Did not go to school because they felt unsafe at school or on their way to or from school on at least 1 day	6.3%	
Injured Threatened or with a weapon on school property one or more times (for example, a gun, knife, or club)		7.5%
Bullied on school property		18.2%
Felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities)		22.6%
Seriously considered attempting suicide		13.3%
Attempted suicide one or more times		7.4%
Suicide attempt resulted in an injury, poisoning or overdose that had to be treated by a doctor or nurse		2.8%
Had five or more drinks of alcohol in a row within a couple of hours on at least 1 day times	23.8%	

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*Note:* Adapted from “Youth Risk Behavior Surveillance: United States, 2009” by the United States Department of Health and Human Services, Centers for Disease Control and Prevention, 2010, *Morbidity and Mortality Weekly Report: Surveillance Summaries*, 59(SS-5), 1-142. Retrieved from <http://www.cdc.gov/healthyyouth/yrbs/publications.htm>

The lifetime prevalence of depression among adolescents is estimated to be 14%, and it is disturbing that less than 40% of these students receive treatment (US HHS SAMHSA, 2003).

Using data from the National Longitudinal Survey of Youth 1997, Macomber (2009) reported the following outcomes for youth with depression:

- They engage in more risk behaviors during adolescence. “Specifically, they are more likely to use marijuana and have sex by age 16; and use other drugs, get into a fight, steal, and run away from home by age 18.” (p. 1)
- Over a third (35 percent) do not earn a high school diploma. They “are also less likely to obtain a degree from a four-year college (13 versus 27 percent).” (p. 1)
- “By age 24, over a quarter (27 percent) of youth who experienced depression/anxiety have been charged with an adult crime, compared with just 16 percent of their peers who experienced less or no depression/anxiety.” (p. 1)

**School phobia.** School is a child’s work. Children spend more time in school than anywhere else. However, for some students, school becomes the place they fear. Nearly 10% of students enrolled in U.S. public schools are absent daily and in some cities, it approaches 30% (Eaton et al., 2008). While most students are absent for valid reasons (illness), there are a growing number of students who are absent because of choice or who are absent because of a mental illness, such as school phobia. Distinguishing between the reasons for prolonged absenteeism is essential for interventions to be successful.

*School phobia* is a difficult term to define. As early as 1932, Broadwin, as cited by Salemi and Brown (2003), defined school phobia as “consistent absence from school...without a

comprehensible reason” (p. 199). Since then, attempts have been made to agree upon a common definition, but it is only been recently that clearer definitions have emerged. However, there is still significant controversy regarding the differential diagnosis between school phobia and related disorders (Salemi & Brown, 2003).

The controversy arises from both the complexity of how the disorder presents itself in young children versus adolescents and the different approaches to treatment advocated by social workers, primary care physicians, psychologists and psychiatrists (Bernstein, 2011; Evens et al., 2005; Kearney & Hugelshofer, 2000; Salemi & Brown, 2003; Shannon, Bergren, & Matthews, 2010; Wilkins, 2008). School phobia has been categorized as school refusal, truancy, school panic, or a form of anxiety (Evans et al., 2005). School phobia is a mental illness that “is simply defined as anxiety and fear associated with going to school that challenges the resources of the school” (Tyrrell, 2005, p. 147).

Kearney and Silverman (1990) proposed that young children and adolescents may be exhibiting a form of an anxiety disorder. School phobia is a complex issue that requires early diagnosis and specific interventions. Describing school phobia as some form of an anxiety disorder does not seem definitive if interventions must be specific to the origin of the behavior in order to be effective in returning the young child or adolescent to school. This is evident in the differences in the criteria for defining the various types of anxiety. Kearney, Eisen, and Silverman (1995) define school phobia in terms of *school refusal behavior*. Tyrrell (2005) states that:

Those with true school refusal attempt to persuade parents to let them stay home from school, exhibit extreme anxiety about attending school, and are usually willing to complete schoolwork as long as it is done at home. Short-term effects include poor

academic performance, parental conflict, and diminishing peer relationships. Long-term and potential lifelong consequences include academic failure, school dropout, employment difficulties, and increased risk of the development of adult psychiatric disorders. (p. 148)

Pilkington and Piersel's (1991) description of the hallmark behavior of these students was used by Salemi and Brown (2003) to summarize the impact of school phobia when they state that the student will not remain in school "despite pressure or threats of punishments from parents, teachers and school administrators" (p. 201).

Given the difficulty in reaching agreement on the definition of school phobia, it is not surprising that the prevalence of this disorder varies significantly. Tyrrell (2005) reports that 1-5% of students could be diagnosed with school phobia, while Kearney and Albano (2004) report up to 28%. Demonstrating the diversity of behaviors within this group of *school refusers*, as students with school phobia are defined, Witts and Houlihan (2007) cited the study conducted by Kearney and Albano (2004) in which the primary diagnosis for 143 children was reviewed. Table 3 describes their findings.

Just as there is disagreement on the differential diagnosis of school phobia and terminology used to describe it, there is equal disagreement on interventions and treatment. Salemi and Brown, health educators, proposed that an essential question for researchers is to

Table 3

*Percent of Children with Differing Diagnoses for School Refusal Behavior*

Primary Diagnosis	% of Students
Separation Anxiety Disorder	6.3%
Generalized Anxiety Disorder	7.5%
Oppositional Defiant Disorder	18.2%
Major Depression	22.6%
Conduct Disorder	13.3%
Specific Phobia	7.4%
Social Phobia	2.8%
Other Diagnosis or No Diagnosis at All	20.9%

*Note:* Definitions of these disorders are in Chapter 1 of this research study. Adapted from “The Functional Profiles of School Refusal Behavior: Diagnostic Aspects” by C. A. Kearney and A. M. Albano, 2004, *Behavior Modification*, 28(1), p. 158.

determine “whether the phobia is stimulated by something in the school setting, phobia is actually *of* [emphasis added] the school, or is it merely *a component* [emphasis added] of the school” (2003, p. 199). The interventions range from psychotherapy, placing the student on shortened days of instruction, and home instruction to legal actions to compel the child to return to school.

Faced with the stresses of daily attendance in school, these students find themselves unable to cope with school. They experience increasing periods of absenteeism often resulting in placement on home instruction. Home instruction for these students results in more isolation, increased anxiety, and at-risk behavior. The research does not indicate that home instruction is a therapeutically appropriate intervention for these students, and in fact, being at home with only one to two hours of instruction daily puts these children and adolescents at greater risk for participating in at-risk behaviors (Wilkins, 2008).

Interventions or treatment, no matter the approach, after the fact does not change the fact that the child's educational experience has been significantly interrupted by long-term absences. It is more efficacious to develop effective prevention programs, both for the child and for the school. What constitutes the components of such a prevention program is a question for the field (Epstein & Sheldon, 2002; Kearney & Hugelshofer, 2000; Salemi & Brown, 2003).

### **Mental Health Supports for Students on Home Instruction**

Specifically, there is little research on the effectiveness on the subgroup of student interventions that are effective for students who do not attend school due to anxiety, depression, or school phobia. These students are often placed on home instruction, where instruction is provided for up to one to two hours a day. Since many parents work, these students are frequently unsupervised and often engage in high-risk behaviors that can complicate their recovery and lives. Treatment for these students requires consistent therapeutic intervention, and as the research acknowledges, only a fraction receive treatment, unless they receive it in school – the very place they avoid.

School administrators, parents, and therapists become increasingly frustrated with the cycle of anxiety, fears, school refusal, and instruction at home. Two purposes of this study was to examine the mental health supports in schools and explore the relationship between these supports and the percentage of students placed on home instruction. This study revealed some of the supports that schools should consider as part of a prevention and intervention program for students with school phobia.

### **Summary**

The majority of the research has focused on implementing school-based mental health supports, systems of care, and the linkage of school reform and mental health (Adelman &



Taylor, 1998; Campisi, 2010; Paternite, 2005; PNFCMH, 2003; Ringeisen et al., 2003; US HHS OSG, 2000; Weist, 2005). However there remain significant gaps in the research, particularly on the effectiveness of specific supports for unique populations of students with mental illness, specifically those who are not in school for long periods of time due to depression, anxiety, or school phobia.

Within the larger population of mental health disorders in children and adolescents, anxiety, school phobia, and depression are growing concerns among educators and communities. They have long-term effects on the lives of students, including school failure, joblessness, drug use, and crime. Many of the students with anxiety, depression, or school phobia leave the school building and are at home receiving tutoring for 10 hours a week. They are isolated, vulnerable, and engage in at-risk behaviors. The resources expended on home instruction could be used more effectively if administrators and teachers knew what was effective in keeping these students in school or returning them as quickly as possible to the classroom.

What has not been studied to any great degree is the effectiveness of specific school supports for students with mental illness and, of more interest to this researcher, the effectiveness of school supports for students placed on home instruction in suburban schools because of anxiety, depression, or school phobia. It is this subpopulation of students with mental illness that has not been studied to any degree, specifically to identify the types of supports that can impact their attendance in school – the place where instruction happens most effectively and support services are most effectively delivered.

### **Chapter 3: Methods**

As described in Chapter 1, the purpose of this quantitative study was to investigate the relationship between the availability of mental health supports provided for students in a sample of NYS suburban schools and the percentages of these students that were provided home instruction for reasons of anxiety, depression, or school phobia. The study was designed to answer the following questions regarding mental health supports for students in NYS suburban schools:

1. What are the types of mental health supports available in suburban schools in NYS?
2. What is the percentage of students placed on home instruction due to anxiety, depression, or school phobia?
3. Is there a relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?
4. Is there a relationship between the types of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?

#### **Participants**

Potential participants were identified from the list of 422 NYS school districts categorized as *suburban* by the NYS Education Department (NYSED). These districts reflect varying wealth, size, needs, and resources. The suburban districts in the Long Island and Westchester regions are different from districts in the rest of the State in many of these demographic elements. Therefore, they were not included in the sample. With the exclusion of

these districts, there were 242 *suburban* districts in the State; 150 were within the four Board of Cooperative Educational Services (BOCES) regions in the eastern region of upstate New York State. The District Superintendent of each of the BOCES was contacted to discuss the research study and to provide comments on the strategies to elicit participating school districts. The superintendent of each the 150 districts were contacted by letter (see Appendix B: Initial Letter to Superintendents). In the letter, their participation was requested, and they were informed that they would receive a subsequent email with the link to the online survey within two weeks. The letter also informed them of the purpose of the study, the method of data collection, and the confidentiality of both data and district participation. The participants were informed that they could decline participation and/or withdraw from the study at any time.

The superintendents were sent an email two weeks after receiving the initial letter from the researcher (see Appendix C). The email again described the study and provided the link to the online survey. Three weeks later, the BOCES District Superintendents of four regions informed potential participating districts of the study and requested their participation.

### **Instrument**

The availability of mental health supports in participating districts was determined through the use of a researcher-developed questionnaire. The questionnaire consisted of two parts. Part I requested the district to identify the total number of students approved for home instruction during the period from September 2010 through May 2011. Part II consisted of a list of programs, services, and interventions, each of which the district was asked to choose one of the following: (1) Available to all students, (2) Available to some students, (3) Not available, or (4) If no, is this something your district needs.

Items included in the survey were based on the work of several major researchers in the

area of children's mental health and school supports (Adelman & Taylor, 2006a, 2010; Doll & Cummings, 2008; Hoagwood et al., 2007; Kutash et al., 2006; Kutash, Duchnowski, Robbins & Keenan, 2008; Paternite, 2005; Stroul & Blau, 2008).

There were a total of 57 individual supports in the survey, encompassing a wide range of supports that are available in school districts. The researcher-developed survey can be found in Appendix A: Survey of Mental Health Supports in Schools. The various supports and interventions in the survey were categorized into three areas: primary prevention supports, early intervention supports, and interventions for chronic and severe problems. These categories reflect the work of Adelman and Taylor (2006b) and are consistent with the categorization of supports found in the Positive Behavior Interventions and Supports initiative (OSEP Technical Assistance Center on PBIS, 2009).

### **Survey Categories and Levels of Intervention**

The supports in the survey were arranged in categories defined as (a) primary prevention supports, (b) early intervention supports and (c) interventions for chronic or severe problems (Adelman & Taylor, 2006b). These levels were independent variables.

***Level 1, primary prevention supports.*** These supports are designed to be available for all students within a district. They may be embedded within the instructional framework (e.g., general health education, character education), key components to developing or sustaining a positive school climate (e.g., Positive Behavior Intervention Supports [PBIS], peer mentoring, drug and alcohol education), or adjunct programs that assist students and families outside the instructional day (e.g., before or after school care, homework programs). This level of intervention supports the healthy development of students. Specifically, it promotes resiliency

and protective buffers in students (Adelman & Taylor, 2006b). It is this resiliency that helps students weather the barriers they encounter in school, in their community or in their families.

***Level 2, early intervention supports.*** For the purposes of this analysis, early prevention is defined as selective or targeted interventions (Kutash, Duchnowski, & Lynn, 2006). Kutash, et al. (2006) further define selective or targeted interventions as being:

...used with students who require more than universal strategies but less than intensive individualized interventions. The purpose of selective or targeted interventions is to support students who are at-risk for or are beginning to exhibit signs of more serious problem behaviors. Such interventions can be offered in small group settings. (p. 11)

This definition of early intervention supports as selective or targeted interventions clearly describes this category of supports in the survey. These supports are most often provided by staff with specific training and skills (e.g., psychologists, social workers, guidance counselors or behavior specialists). While these providers may see students individually or in groups for short periods of time, a primary role is consultation with teachers, administrators, and families as a bridge between school-wide supports and the most intensive level of supports for students with chronic and severe behaviors. The intent is to intervene early to prevent the escalation of the problems students present.

***Level 3, interventions for chronic or severe problems.*** For the purposes of this analysis, this level is defined as an intensive individualized intervention (Kutash et al., 2006). This level of intervention is used “when problem behaviors are dangerous, highly disruptive, and may result in social or educational exclusion” (Kutash et al., 2006, p. 11).

This is the most intensive of all levels of intervention, and the supports are typically provided by community providers, medical professionals, mental health professionals or

educational staff with specific expertise in working with students with severe or chronic behaviors (e.g., psychiatrists, crisis teams, school resource officers, psychiatric hospitals, community mental health providers, programs designed to reach disenfranchised youth). Consultation continues to be an important component at this level; however, the focus of the consultation is the de-escalation of a severe problem, to prepare the school for the student to return to the classroom from a highly restrictive placement (e.g., psychiatric hospitalization), or to design a highly intensive student-specific educational program that has a greater likelihood of educational success.

Together, these three levels of interventions represented a “broad based approach that encompassed health promotion, problem prevention and early – after – onset interventions, as well as specific assistance for those with chronic and severe problems (Adelman & Taylor, 2006b, p. 71). Although Adelman and Taylor (2006b) described them as an “interconnected set of interventions,” there are distinct differences between the three levels of interventions that set them apart and, in practice, often leave them unconnected and fragmented. Definitions of the three levels are in Chapter 1.

In addition to survey data, district specific data from NYSED, specifically the *New York State District Report Card Accountability and Overview Reports for 2009-10*, *Comprehensive Information Report for 2009-10*, *Fiscal Accountability Supplement 2008-09*, and *Special Education School Data Profile for 2009-10* were used in the analysis. NYS districts are required annually to submit data for these statistical reports consistent with the requirements of both federal and state laws, including the *Individuals with Disabilities Education Improvement Act* (IDEA) and the *No Child Left Behind Act* (NCLB).

The reports from the NYSED used in this research reflect data submitted by participating

districts for the 2009-10 school year with the exception of the *Fiscal Accountability Supplement 2008-09*, which reflects data submitted for the 2008-09 school year, as fiscal data submitted for the *Fiscal Accountability Supplement* is always one year behind the submission of academic data.

### **Design**

The study was designed as a quantitative study since the purpose of this study is best addressed by understanding the factors (mental health supports) that influence an outcome (percent of students placed on home instruction due to anxiety, depression or school phobia).

### **Validity**

To determine the face validity of the survey, the draft survey was sent to 15 members of the Council of New York State Special Education Administrators (CNYSEA) for their review and comments. These administrators had direct knowledge of the supports available in districts, as well as mental health disorders in students. Their perspective was important in helping to determine the validity of the survey instrument. The survey was revised to reflect the comments.

In addition, Cronbach's alpha coefficient was used to assess the internal consistency of the survey items. The results indicated that the items of the survey had good internal consistency as evidenced by the coefficient of .87. This meant that the internal reliability of the survey itself was assured and may be used by other researchers or districts that want to assess the availability of mental health supports in their districts.

### **Variables**

The unit of analysis is the district. In all of the research questions, the dependent variable was the percentage of students on home instruction due to anxiety, depression, or school phobia. In addition to the primary indicators, the study also examined a number of variables, including

demographic data, classification of students with disabilities, dropout rates, and poverty rates. The independent variables were the level of support and the specific school supports identified within the survey.

### **Data Analysis**

The survey results were downloaded from Survey Monkey into Microsoft Excel and imported into SPSS 19 for analysis. Data analysis employed both descriptive and inferential statistics. Nonparametric techniques, specifically the Spearman Rho, was used to analyze each research question. Using Spearman's Rho required the ranking of the supports to allow the statistical analysis of the relationship between the dependent variable (percentage of students on home instruction due to depression, anxiety, or school phobia) and each of the independent variables, including the levels of intervention described in the following section. Appendices D and E provide graphical representations of the analysis methods.

### **Data Analysis Procedures**

The analyses were completed using the Statistical Package for Social Sciences (SPSS) Version 19.0, copyright 2010. Descriptive statistics were used to determine the frequencies and correlations between the dependent variable (percentage of students placed on home instruction due to anxiety, depression, or school phobia) and the independent variables. Given the small sample, nonparametric analyses were used, since it was the more conservative approach.

Data from the analyses were not in a normal distribution and were skewed. Therefore, a correlational method, Spearman's Rho, was used to explore whether positive or negative relationships existed between the levels of support and the percentage of students placed on home instruction due to anxiety, depression, or school phobia. The same correlational method was used to explore whether positive or negative relationships existed between the proximity of



the mental health supports and the percentage of students placed on home instruction due to anxiety, depression, or school phobia.

The first research question asked what types of mental health supports were available in NYS suburban schools. The frequency of mental health supports distribution available in the participating districts was determined. Using district indications of response choice #3 (not available), a frequency distribution was developed for the supports that were not available in participating districts. Related to this last analysis, district indications of response choice #4 (If no, is this something your district needs) were used to also determine what mental health supports districts would like to have, if they did not have them currently. As with all of the research questions, the relationship between specific survey questions and demographic data were explored.

The second research question asked the percentage of students on home instruction for reasons of anxiety, depression, or school phobia. The percentage was determined by dividing the number of students on home instruction for the above reasons by the total number of students on home instruction. A correlational analysis was then completed using the percentage of students on home instruction and each of the mental health supports.

Research question three asked “Is there a relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?” This question required the researcher to define the three levels used in the survey: *primary prevention supports, early intervention supports, and interventions for chronic or severe problems.*

The levels and methods used to operationalize the definitions are defined in the following section. Once defined and operationalized, a frequency distribution of levels in the sample was

completed. The correlation of the relationship between these levels and the percentage of students on home instruction due to anxiety, depression, or school phobia was investigated using Spearman's Rho. Relationships between these correlations and demographic data were also investigated.

Research question four asked if a relationship existed between the individual supports and the percentage of students on home instruction due to anxiety, depression, or school phobia. This question required the researcher to define the intensity or importance of each mental health support. Once defined, it could be determined if a relationship existed between the individual mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia. Again, this was investigated using Spearman's Rho. Relationships between these correlations and demographic data were also investigated.

## Chapter 4: Data Analysis

This quantitative study was designed to investigate the relationship between the availability of mental health supports provided for students in a sample of NYS suburban schools and the rates at which students were provided home instruction for reasons of anxiety, depression, or school phobia. The study answers the following questions regarding mental health supports for students in New York State (NYS) suburban schools:

1. What are the types of mental health supports available in suburban schools in NYS?
2. What is the percentage of students placed on home instruction due to anxiety, depression, or school phobia?
3. Is there a relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?
4. Is there a relationship between the types of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?

The unit of analysis was the district. The dependent variable was the percentage of students on home instruction due to anxiety, depression, or school phobia. The independent variables were the level of support and the specific school supports identified within the survey.

Participants in the study consisted of 17 suburban school districts. The districts represented suburban districts in the upstate region of NYS. Sixteen of the 17 school districts were designated as average need districts, and one was designated as a low need district using NYSED data from *New York State District Report Card Accountability and Overview Reports for 2009-10, Comprehensive Information Reports for 2009-10, and Fiscal Accountability Supplements 2008-09*. The districts were similar in many of their demographics. For example:

- Drop-out rates were 1% for all students in 16/17 districts, with one district at less than 5%;

- Graduation rates for all students in 15/17 districts were within 8 percentage points (83% to 91%); two districts were 10 percentage points below highest graduation rate;
- All of the districts had less than 10% of their students accessing free and reduced lunch (poverty);
- The majority of students in all the districts were white (67% to 98%); and
- Attendance rates at all of the districts exceeded 94%.

There were, however, some differences in the demographics of the districts. District enrollment and expenditures per pupil varied, even within the need/resource capacity designation of average need. To avoid identification of the participating districts in the small sample, *district-specific data* on size and expenditures was not provided. However, Tables 4 and 5 provide aggregate information on enrollment and per pupil cost.

Table 4

*Enrollment for Participating Suburban Districts*

Student Enrollment	Number of Participating Districts
1,000 to 2,000	4
2,001 to 5,199	6
5,200 to 6,900	5
6,901 to 10,000	2

Table 5

*Per Pupil Expenditures for Participating Suburban Districts*

Per Pupil Expenditures	Number of Participating Districts
Less than \$13,599	5
\$13,600 to \$15,900	6
\$15,901 to \$19,850	6

The methods used to analyze survey results in the research study are described in Chapter 3. Descriptive statistics were used to determine the frequencies and correlations between the dependent variable (percentage of students placed on home instruction due to anxiety, depression, or school phobia) and the independent variables. Spearman's Rho, was used to explore whether positive or negative relationships existed between the levels of support and the percentage of students placed on home instruction due to anxiety, depression, or school phobia.

Items included in the survey were based on the work of several major researchers in the area of children's mental health and school supports (Adelman & Taylor, 2006a, 2006b, 2010; Doll & Cummings, 2008; Hoagwood et al., 2007; Kutash et al., 2006; Kutash et al., 2008; Paternite, 2005; Stroul & Blau, 2008). There were a total of 57 items in the survey. They encompassed a wide range of mental health supports that may be available in school districts, each of which the district was asked to choose one of the following: (1) Available to all students, (2) Available to some students, (3) Not available, or (4) If no, is this something your district needs. The researcher-developed survey can be found in Appendix A: Survey of Mental Health Supports in Schools.

### **Research Question 1: What Are the Types of Mental Health Supports Available in Suburban Schools in NYS?**

The first research question asked what types of mental health supports are available in NYS suburban schools. To answer this question, the frequency of mental health supports distribution available in the participating districts was used. Additionally, using district indications of response choice #3 (not available), a frequency distribution was developed for the supports that were not available in the participating districts. Related to this analysis, district indications of response choice #4 (If no, is this something your district needs) were used to

calculate which mental health supports districts would like to have, if they did not have them currently. For later analysis, responses #3 and #4 were collapsed for a *not available* level.

The individual supports in the survey were categorized into three areas: primary prevention supports, early intervention supports, and interventions for chronic or severe problems. The following analysis reflects this categorization. Definitions of these three levels are available in Chapter 1. As with all of the research questions, the relationship between specific survey questions and demographic data were explored.

**Availability of supports categorized as primary prevention.** While three of the supports in Level 1, primary prevention supports, were available to all or some of the students, four of the supports were unavailable to varying degrees. Table 6 describes the frequency of availability for each mental health support.

Table 6

*Availability of Primary Prevention Supports*

Support	Available to All	Available to Some	Not Available	Not Available, but Needed
1.1 General Health Education	100.0%			
1.1.1 Drug & Alcohol Education	93.3%	6.7%		
1.2 Character Education Program	66.7%	33.3%		
1.3 Conflict Resolution	53.3%	46.7%		
1.4 Homework Programs (before or after school)	46.7%	46.7%	6.7%	
1.5 Child Care Program (before or after school)	40.0%	46.7%	13.3%	
1.6 Positive Behavior Intervention and Support Program (PBIS)	40.0%	20.0%	33.3%	6.7%

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1.7 Peer Mentoring	13.3%	80.0%	6.7%
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The supports most frequently available to all students were general health education and drug and alcohol education. Conflict resolution was available to all students in 53.3% of the districts. Before and after school homework programs and childcare programs were available to all students in less than half of the districts. Peer mentoring was available to all students in 13.3% of the districts but was available to some students in 80% of the districts. PBIS was available to all or some students in 60% of the districts. Almost seven percent of the districts responded that the only support that was not available but *needed* was PBIS.

**Availability of supports categorized as early intervention.** As defined in Chapter I, Level 2, early intervention supports, includes those defined as selective or targeted interventions, most often provided by staff with specific training and skills (e.g., psychologists, social workers, guidance counselors or behavior specialists). The intent is to intervene early to prevent the escalation of the problems students present. Table 7 describes the frequency of availability for each early intervention mental health support in the districts and when specific staff provides each.

In Level 2, Early Intervention, the proportion of supports reported available to all students is higher than in Level 1. Approximately 63% of Level 1 supports were provided to half or fewer students, whereas only 22% of the Level 2 supports were offered to half or fewer students. The most frequent supports available to *all* students was the Child Study Team (CST)/Pupil Services Team (PST) (100%). The CST and PST are defined in Chapter 1.

The remaining supports in Level 2, early intervention, were available to lesser degrees to *all* students; however all of them were available to some students to varying degrees. The majority of the remaining supports were available to all students in at least two-thirds of the

districts. School counselors and guidance counselors were the second most available services to



Table 7

*Availability of Early Intervention Supports*

Support	Available to All	Available to Some	Not Available	Not Available, but Needed
2.1 Child Study Team (CST)/Pupil Services Team (PST)	100.0%			
2.2 Educational Team Meetings With Families	100.0%			
2.3 Family Education on Mental Health Concerns	40.0%	46.7%	6.7%	6.7%
2.4 Anti-bullying Curriculum	73.3%	20.0%		6.7%
2.5 School Counselor	86.7%	6.7%	6.7%	
2.5.1 Group Counseling (friendship, divorce, conflict resolution)	73.3%	20.0%		6.7%
2.5.2 Social Skills Training	40.0%	46.7%	13.3%	
2.6 Guidance Counselor	86.7%	13.3%		
2.6.1 Career Guidance	66.7%	33.3%		
2.6.2 Individual Student Counseling	80.0%	20.0%		
2.6.3 Academic Planning and Counseling	80.0%	20.0%		
2.7 Social Worker	60.0%	20.0%	20.0%	
2.7.1 Counseling - Group	46.7%	46.7%	6.7%	
2.7.2 Counseling - Individual	53.3%	40.0%	6.6%	
2.7.3 Teacher Consultation on Individual Students	66.7%	26.7%	6.6%	
2.7.4 Teacher Consultation (Classroom Management Strategies)	73.3%	20.0%	6.7%	
2.7.5 Parent Consultation	60.0%	26.7%	13.3%	
2.7.6 Coordinate Parent Referral to Community Agencies	60.0%	33.3%	6.7%	
2.7.7 Behavior Intervention Plan for Student	73.3%	20.0%	6.7%	

all students in 86.7% of the districts. Each of these professionals provided some student counseling. School counselors provided group counseling on issues such as friendship, divorce, and conflict resolution to *all* students in 73.3% of the districts. Guidance counselors provided individual student counseling to all students in 80% of the districts. The least available support to *all* students was family education on mental health concerns in 40% of the districts.

Mental health supports by social workers were provided to a lesser extent than those by guidance or school counselors. Social workers were available to *all* students in 60% of districts, and 20% of the districts provided them to some students. A fifth of the responding districts (20%) indicated that they do not have a social worker available in the district. No respondents indicated that, if it was not available, it was needed.

Individual counseling was available to all students in 60% of the districts and to some students in 33.3% of the districts. Group counseling was available to all students in less than half of the districts (46.7%) and similarly to some students (46.7%). The most frequent supports provided by social workers for all students were teacher consultation on classroom management strategies in 73.3% of the districts and behavior intervention plans in 73.3% of the districts.

The least frequent support available to all students was family education on mental health concerns (40% of districts). Lastly, 6.7% of districts reported that family education on mental health concerns, anti-bullying curriculum, and group counseling were not available to either all or some students but was needed.

**Availability of supports for chronic or severe problems.** For the purposes of this analysis, Level 3 supports are defined as intensive individualized that are used when problem behaviors are dangerous, highly disruptive, and may result in social or educational exclusion. Table 8 describes the frequency of availability for each support in the suburban schools and

Table 8

*Availability of Supports for Chronic or Severe Problems*

Support	Available to All	Available to Some	Not Available	Not Available, but Needed
3.1 Psychiatric Evaluation & Assessment	33.30%	33.30%	33.30%	
3.1.1 Training for Staff (Mental Illness, Psychotropic drugs, etc.)	26.70%	46.70%	13.30%	13.30%
3.1.2 Psychiatric Nurse Practitioner	13.30%	20.00%	60.00%	6.70%
3.1.3 Consultants on Mental Health Disorders (Mood Disorders, Oppositional Defiant Disorder, School Phobia, etc.)	20.00%	60.00%	20.00%	
3.2 Crisis Intervention Teams	73.30%	20.00%	6.70%	
3.2.1 Building Level Crisis Team	86.70%	13.30%		
3.2.2 District Crisis Team	86.70%	13.30%		
3.2.3 Community Mobile Crisis Team	33.30%	6.70%	40.00%	20.00%
3.2.4 School Resource Officer	26.70%	6.70%	60.00%	6.70%
3.3 Collaboration with Psychiatric Hospitals	46.70%	26.70%	20.00%	6.70%
3.3.1 Transition Meetings for Students Re-entering School from Psychiatric Hospitalization	40.00%	33.30%	20.00%	6.70%
3.3.2 Transition Plans for Students Re-entering School from Psychiatric Hospitalization	40.00%	40.00%	6.70%	13.30%
3.3.3 Transition Educational Programs for Students Re-entering School from Psychiatric Hospitalization	40.00%	26.70%	20.00%	13.30%
3.4 Community Mental Health Services Co-located in the District	20.00%	13.30%	46.70%	20.00%
3.5 GED Program	33.30%	33.30%	26.70%	6.70%
3.6 Drop-Out Reentry Program	26.70%	20.00%	53.30%	

when provided by specific staff. The distribution of reported availability of supports showed much more variability than in the previous two levels of supports. This appears to be due to an

increase in the degree of non-availability (not available and not available, but needed) of these Level 3 supports in districts.

The supports in Level 3, interventions for chronic or severe problems, were the least frequently available to all students. They were also the most frequently identified as needed by the school districts that responded to the survey. Crisis intervention teams at the building and district levels were available to all or some students in all of the districts. Consultants on mental health disorders were available to all (20% of districts) or some (60% of districts) of students in 80% of districts.

Psychiatric evaluation and assessment was available in two-thirds of the districts. This support was available to all (33.3% of districts) or some (33.3% of districts) of students. Collaboration with psychiatric hospitals was available to all students in 46.7% of districts and to some students in 26.7% of the districts. Specific collaborative avenues (transition meetings, planning or educational programs) for students re-entering school from psychiatric hospitalization were available for all students in less than half of the districts (40%). All districts indicated that these collaborative supports with psychiatric hospitals were needed.

Mobile crisis teams (see Chapter 1 for definition) were available to all or some students in 40% of districts, with 20% of districts indicating that while this support was not available, it was needed. Community mental health services co-located in the district were available to all or some students in 33.3% of districts, and 20% of districts reported that this support, while not available, was needed.

GED programs were available to all students in 33.3% of districts and to some students in another 33.3% of districts. GED programs were not available to any students in 26.7% of districts, with 6.7% of districts indicating that they were needed. A psychiatric nurse practitioner

was the least available support, with 60% of districts reporting it was not available to any students. The support least available to all or some students was dropout re-entry programs (53.3% of districts), and districts indicated that this support was needed.

**Research Question 2: What is the Percentage of Students Placed on Home Instruction due to Anxiety, Depression, or School Phobia?**

To answer this question, descriptive statistics were used to calculate a percentage for all districts of students placed on home instruction due to anxiety, depression, or school phobia. Descriptive statistics were used to generate a sum for both the number of students on home instruction due to anxiety, depression, or school phobia and the total number of students on home instruction. While the average reported percentage of students placed on home instruction due to anxiety, depression, or school phobia ranged from 0 to 100%, the average for all districts was 16.2%. To facilitate interpretation of the results, Table 9 provides aggregate data showing the number of districts that fell within discrete ranges of percents of students on home instruction due to anxiety, depression, or school phobia. This also ensures that identification of participating districts in the small sample is not provided.

Table 9

*Percentage of Students Placed on Home Instruction Due to Anxiety, Depression, or School Phobia*

Percentage of Students	Number of Participating Districts
Less than 20%	9
21% to 49%	2
More than 50%	2
Unreported	4

### **Research Question 3: Is there a Relationship Between the Level of Mental Health Supports and the Percentage of Students placed on Home Instruction due to Anxiety, Depression, or School Phobia?**

To answer this question, the analysis of data was completed using Spearman's Rho. Using SPSS, Spearman's Rho analyses were run to explore the relationships, positive or negative, between the dependent variable (percent of students on home instruction due to anxiety, depression or school phobia) and the independent variables of the three levels of support.

**Correlation to Level 1, Primary Prevention Supports.** According to Table 10 below, there were no significant correlations between the mental health supports provided in Level 1 and the percentage of students on home instruction due to anxiety, depression or, school phobia (%ADS). No Level 1 coefficients were statistically significant at the  $\alpha = .05$  level. This means that the availability of these supports is not related to the percentage of students placed on home instruction for the reasons of anxiety, depression or school phobia.

**Correlation to Level 2, Early Intervention Supports.** There were three mental health supports within Level 2, early intervention supports, which were significantly related to the percentage of students on home instruction due to anxiety, depression, or school phobia. Table 11 displays a summary of the correlations between the percent of students on home instruction due to anxiety, depression, or school phobia and each of the Level 2 mental health supports. Table 11 shows the statistical significance of the three supports. Table 11 shows a statistical significance ( $p < .01$ ) between the support of family education on mental health concerns and the percentage of students placed on home instruction for reasons of anxiety, depression or school phobia. The more family education on mental health concerns such as anxiety and

depression is available, the more likely it is that the percentage of students on home instruction will increase. There is a statistically significant inverse relation between group counseling provided by social workers (-.72) and individual counseling provided by social workers (-.62). The more group or individual counseling by social workers is available for all students, the more likely it is that the percentage of students on home instruction due to anxiety, depression or school phobia will decrease.

Table 10

*Summary of Correlations Between Percent of Students on Home Instruction Due to Anxiety, Depression, or School Phobia (%ADS) and Level 1 Supports*

Item	1.1	1.1.1	1.2	1.3	1.4	1.5	1.6	1.7
%ADS	N/A	-0.4	0	0.18	-0.01	0.2	0.09	-0.42
1.1 General Health Education	—							
1.1.1 Drug & Alcohol Education	N/A	—						
1.2 Character Education Program	N/A	.29	—					
1.3 Conflict Resolution	N/A	-.28	.38	—				
1.4 Homework Programs	N/A	.04	.16	.43	—			
1.5 Child Care Program	N/A	-.19	.19	.18	.42	—		
1.6 PBIS	N/A	.14	.19	.40	.17	-.11	—	
1.7 Peer Mentoring	N/A	.30	.30	.21	-.16	-.16	.12	—

Note: N/A = Correlation Coefficient not calculated due to lack of variance in original values

**Correlation to Level 3, Interventions for Chronic or Severe Problems.** There were six mental health supports within Level 3, interventions for chronic or severe problems, that were significantly related to the percentage of students on home instruction due to anxiety, depression, or school phobia. Table 12 displays a summary of the correlations between the percent of

students on home instruction due to anxiety, depression, or school phobia and each of the Level 3 supports, including the six supports that had statistically significant correlations.



Table 11

Correlation Table for Percent of Students on Home Instruction Due to Anxiety, Depression, or School Phobia (%ADS) and Level 2 Supports

Item	2.2	2.3	2.4	2.5	2.5.1	2.5.2	2.6	2.6.1	2.6.2	2.6.3	2.7	2.7.1	2.7.2	2.7.3	2.7.4	2.7.5	2.7.6	2.7.7
%ADS	0.59	.77**	-0.08	-0.05	-0.26	0.49	-0.53	-0.3	0.15	-0.46	-0.14	-.72*	-.62*	-0.25	-0.25	0.46	0.41	-0.14
2.2 Educational Team Meetings With Families	—																	
2.3 Family Education on Mental Health Concerns	.65**	—																
2.4 Anti-bullying Curriculum	-.05	.07	—															
2.5 School Counselor	.24	-.10	.20	—														
2.5.1 2.5.1 Group Counseling (friendship, divorce, conflict resolution)	.36	.07	-.07	.59*	—													
2.5.2 2.5.2 Social Skills Training	.65**	.73**	.23	.14	.23	—												
2.6 Guidance Counselor	-.24	-.45	.18	.38	.18	-.12	—											
2.6.1 2.6.1 Career Guidance	-.43	-.57*	.25	.11	-.13	-.34	.56*	—										
2.6.2 2.6.2 Individual Student Counseling	.08	-.11	-.30	.26	.05	-.30	.29	.35	—									
2.6.3 2.6.3 Academic Planning and Counseling	-.30	-.57*	.05	.26	.05	-.30	.78**	.71**	.17	—								
2.7 2.7 Social Worker	-.48	-.29	-.19	-.02	-.03	-.29	.00	.22	.26	-.13	—							
2.7.1 2.7.1 Counseling - Group	-.35	-.38	-.04	-.07	.21	-.19	.30	.29	.09	.09	.49	—						
2.7.2 2.7.2 Counseling - Individual	-.55*	-.44	.04	-.36	-.29	-.24	.00	.39	-.15	.15	.38	.68**	—					
2.7.3 2.7.3 Teacher Consultation on Individual Students	.17	.00	.21	-.27	-.07	.06	.11	.06	-.02	-.02	.07	.49	.32	—				
2.7.4 2.7.4 Teacher Consultation (Classroom Management Strategies)	-.05	-.06	.31	-.23	-.36	.01	.18	.17	.05	.05	.17	.40	.45	.88**	—			
2.7.5 2.7.5 Parent Consultation	.42	.45	-.17	-.31	-.17	.26	-.31	-.32	.02	-.40	.22	.07	-.06	.67**	.57*	—		
2.7.6 2.7.6 Coordinate Parent Referral to Community Agencies	.36	.40	-.14	-.31	-.14	.25	-.31	-.30	-.09	-.40	.28	.13	-.02	.64**	.52*	.98**	—	
2.7.7 2.7.7 Behavior Intervention Plan for Student	.27	.10	-.07	-.23	-.36	.17	.18	-.13	.05	.05	-.05	.14	.20	.60*	.71**	.57*	.52*	—

Note: \*p < .05, \*\*p < .01. Support 2.1 (Child Study Team/Pupil Services Team) not displayed, as the correlation coefficient was not calculated due to its lack of variance in original values.

Table 12

*Correlation Table for Percent of Students on Home Instruction Due to Anxiety, Depression, or School Phobia (%ADS) and Level 3 Supports*

Item	3.1	3.1.1	3.1.2	3.1.3	3.2	3.2.1	3.2.2	3.2.3	3.2.4	3.3	3.3.1	3.3.2	3.3.3	3.4	3.5	3.6
%ADS	.67*	0.47	0.45	0.53	.77**	0.4	0.4	.72*	0.54	0.6	0.47	.62*	.74**	0.19	0.55	.61*
3.1 Psychiatric Evaluation & Assessment	—															
3.1.1 3.1.1 Training for Staff (Mental Illness, Psychotropic drugs, etc.)	.56*	—														
3.1.2 3.1.2 Psychiatric Nurse Practitioner	.56*	.10	—													
3.1.3 3.1.3 Consultants on Mental Health Disorders (Mood Disorders, Oppositional Defiant Disorder, School Phobia, etc.)	.65**	.29	.53*	—												
3.2 Crisis Intervention Teams	.39	.25	.41	.50	—											
3.2.1 3.2.1 Building Level Crisis Team	.24	.00	.27	.31	.59*	—										
3.2.2 3.2.2 District Crisis Team	.24	.00	.27	.31	.59*	1.00**	—									
3.2.3 3.2.3 Community Mobile Crisis Team	.24	.59*	.21	.00	.48	.31	.31	—								
3.2.4 3.2.4 School Resource Officer	.31	.27	.31	.40	.42	.27	.27	.28	—							
3.3 Collaboration with Psychiatric Hospitals	.77**	.52*	.53*	.64**	.54*	.34	.34	.48	.29	—						
3.3.1 3.3.1 Transition Meetings for Students Re-entering School from Psychiatric Hospitalization	.51	.22	.77**	.40	.30	.31	.31	.42	.37	.65**	—					
3.3.2 3.3.2 Transition Plans for Students Re-entering School from Psychiatric Hospitalization	.46	.24	.78**	.31	.22	.15	.15	.55*	.17	.59*	.88**	—				
3.3.3 3.3.3 Transition Educational Programs for Students Re-entering School from Psychiatric Hospitalization	.48	.31	.77**	.49	.43	.27	.27	.60*	.24	.64*	.80**	.94**	—			
3.4 Community Mental Health Services Co-located in the District	.33	.15	.68**	.25	.18	.27	.27	.35	.36	.39	.62*	.61*	.63*	—		
3.5 GED Program	.50	.45	.44	.13	.56*	.24	.24	.41	.36	.50	.42	.27	.30	.38	—	
3.6 Drop-Out Reentry Program	.37	.16	.82**	.24	.53*	.35	.35	.47	.20	.46	.76**	.75**	.77**	.58*	.68**	—

Note: \*p < .05, \*\*p < .01.

There was a statistically significant positive correlation ( $p < .01$ ) between the supports of crisis intervention teams, transition education programs for students re-entering from psychiatric hospitalization, and transition plans for students re-entering school from psychiatric hospitalization. The correlations were also significant ( $p < .05$ ) between psychiatric evaluations and assessments, dropout re-entry programs, community mobile crisis teams, and percentage of students placed on home instruction for reasons of anxiety, depression or school phobia. The more these supports are available, the greater the likelihood that the percentage of students on home instruction due to anxiety, depression, or school phobia will increase.

As summarized in Table 13, there were a total of nine mental health supports (three in Level 2 and six in Level 3) that demonstrated a correlation to the dependent variable of the percentage of students on home instruction due to anxiety, depression, or school phobia.

Table 13

*Statistically Significant Correlations Between Supports and Percent of Students on Home Instruction Due to Anxiety, Depression, or School Phobia (%ADS)*

Level of Support	Item	Support	Correlation with %ADS
2	2.3	Family Education on Mental Health Concerns	.77**
2	2.7.1	Counseling - Group	-.72*
2	2.7.2	Counseling - Individual	-.62*
3	3.1	Psychiatric Evaluation & Assessment	.67*
3	3.2	Crisis Intervention Teams	.77**
3	3.2.3	Community Mobile Crisis Team	.72*
3	3.3.2	Transition Plans for Students Re-entering School from Psychiatric Hospitalization	.62*
3	3.3.3	Transition Educational Programs for Students Re-entering School from Psychiatric Hospitalization	.74**
3	3.6	Drop-Out Reentry Program	.61*

Note: \* $p < .05$ , \*\* $p < .01$

**Correlation to demographic factors.** Correlations were also investigated between each of the demographic factors and the percentage of students on home instruction due to anxiety, depression, or school phobia. Table 14 summarizes the results of this analysis. The only demographic factor that was significantly correlated to the percentage of students

Table 14

*Correlation Table for Percent of Total Students in Home Instruction (%HI), Percent of Students in Home Instruction Due to Anxiety (%ASD), School Phobia, and Demographic Factors*

	Item								
Item	% HI	% ASD	% Classification	% Out	% Free	% Reduced	% SWD Dropout	% All Dropout	% Suspensions
% HI	1.00								
% ASD	.29	1.00							
% Classification	.27	-.43	1.00						
% Out	.06	-.15	-.45	1.00					
% Free	.03	-.32	.27	-.21	1.00				
% Reduced	-.08	-.39	.03	-.10	.85**	1.00			
% SWD Dropout	.09	.29	.22	-.70**	.14	-.03	1.00		
% All Dropout	.04	-.67*	.34	-.01	.55*	.63**	-.04	1.00	
% Suspensions	.21	-.26	.37	.10	.43	.29	-.38	.51*	1.00

\*p<.05, \*\*p<.01

Note: \*p < .05, \*\*p < .01

on home instruction due to anxiety, depression, or school phobia was the dropout percent for all students (.67). The correlation was significant between the dropout rate and the percentage of students on home instruction for reasons of anxiety, depression, and school phobia.

The next step was to investigate if there was a relationship between these mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia. Therefore, a regression analysis was required to investigate both the contribution, if any, of each support and to further investigate the contributions of the nine supports as a group. In this analysis, these nine supports were referred to as a *suite of supports*. While a relationship was revealed between this suite of supports and the dependent variable, the next essential question was to determine to what extent this suite of supports contributed to the variance of the percentage of students on home instruction due to anxiety, depression, or school phobia.

#### **Research Question 4: Is There a Relationship Between the Types of Supports and the Percentage of Students on Home Instruction Due to Anxiety, Depression, or School Phobia?**

A linear regression analysis was run between each of the nine supports and the percentage of students on home instruction due to anxiety, depression, or school phobia. No significant results were found in this analysis ( $R^2 = .45$ ,  $F(7, 16) = 1.9$ ,  $p > .05$ ). This may be due to the small sample size. Table 15 summarizes this analysis.

Similarly, an additional regression analysis was used to investigate each of the nine supports as predictors with dropout rate as the dependent variable or criterion. This analysis was not originally planned in the research study. However, since dropout rate was the only demographic factor that was significantly related to the percent of students on

home instruction due to anxiety, depression, or school phobia, it was important to pursue the additional analysis.

Table 15

*Linear Regression Table for Suite of Interventions' Contribution to Percent of Students on Home Instruction Due to Anxiety, Depression, or School Phobia (%ADS)*

	<i>B</i>	<i>SE B</i>	$\beta$	P Values
2.3	-16.35	238.94	-0.41	<i>p</i> >.05
2.7.1	-52.61	47.01	-1.14	<i>p</i> >.05
2.7.2	-0.38	46.02	-0.01	<i>p</i> >.05
3.1	31.13	46.02	0.82	<i>p</i> >.05
3.2	-50.32	56.77	-1.07	<i>p</i> >.05
3.2.3	9.37	29.96	0.30	<i>p</i> >.05
3.3.2	-59.41	118.31	-1.48	<i>p</i> >.05
3.3.3	16.35	241.24	0.49	<i>p</i> >.05
3.6	53.44	56.77	1.48	<i>p</i> >.05

*Note:* Adjusted  $R^2 = .45$  (*p* > .05)

The purpose of this post hoc analysis was to investigate whether or not the suite of nine supports contributed to the dropout rate in addition to the percent of students on home instruction due to anxiety, depression, or school phobia. The essential question was “If the suite of supports is related to the percentage of students on home instruction due to anxiety, depression or school phobia, *and* the drop-out rate is also related to the percentage of students on home instruction due to anxiety, depression, or school phobia; *is* the suite of supports contributing to the drop-out rate in addition to the percentage of students on home instruction due to anxiety, depression or

school phobia?” This second regression was completed using the suite of supports as the independent variable. Again, no significant results were found ( $R^2 = .16$ ,  $F(7, 16) = 1.3$ ,  $p > .05$ ). There may not be a direct relationship or contribution of the suite of supports to the dropout rate, but both the dropout rate and the suite of supports *are related to the percentage of students on home instruction due to anxiety, depression, or school phobia*.

In an attempt to understand why, given that each of the nine was previously correlated to the dependent variable, a post hoc bivariate correlation of the nine supports with each other was run. The correlation between each of the mental health supports in the suite showed that all but one (psychiatric consultation) of the nine was correlated with at least one other support. These supports are not independent of each other, so they confound the regression analysis. Similarly, they confound the analysis of the relationship between these nine supports and the dropout rate (see Table 16).

In summary, while nine individual mental health supports had significant correlations to the percentage of students on home instruction for reasons of anxiety, depression, or school phobia, no individual support can be identified that contributes to the variance of the rates of students on home instruction for the reasons described above.



Table 16

*Linear Regression Table for Suite of Interventions' Contribution to Dropout Rate*

Level of Support	Item	Support	<i>B</i>	<i>SE B</i>	$\beta$
2	2.3	Family Education on Mental Health Concerns	0.00	0.05	
2	2.7.1	Counseling - Group	0.01	0.01	0.51
2	2.7.2	Counseling - Individual	-0.01	0.01	-0.62
3	3.1	Psychiatric Evaluation & Assessment	0.01	0.01	1.04
3	3.2	Crisis Intervention Teams	0.00	0.00	-0.23
3	3.2.3	Community Mobile Crisis Team	0.00	0.01	-0.04
3	3.3.2	Transition Plans for Students Re-entering School from Psychiatric Hospitalization	0.01	0.01	0.65
3	3.3.3	Transition Educational Programs for Students Re-entering School from Psychiatric Hospitalization	0.01	0.02	1.07
3	3.6	Drop-Out Reentry Program	-0.02	0.02	-2.20

*Note:* Adjusted  $R^2 = .16$  ( $p > .05$ )

## **Chapter 5: Summary of Findings, Conclusions, and Recommendations**

While studies have provided valuable direction in providing mental health services in schools, there has been little research on the effectiveness of these services on the subgroup of these students who do not attend school due to anxiety, depression, or school phobia. The research has been limited to defining the impact of these mental illnesses on school attendance and on therapeutic interventions in clinical settings (Dube & Orpinas, 2009; Foa & Andrews, 2006; Kearney & Albano, 2004; Last & Strauss, 1990; Lyon, 2007; Salemi, & Brown, 2003; Taylor & Adelman, 1990; Tyrrell, 2005). These students are often placed on home instruction, where instruction is provided for up to one to two hours a day. Since many parents work, these children and youth are frequently unsupervised and often engage in high-risk behaviors that can complicate their recovery and lives. Treatment for these students requires consistent therapeutic intervention, and as the research acknowledges, only a fraction receive treatment, unless they receive it in school – the very place they avoid.

The purpose of this quantitative study was to investigate the relationship between the availability of mental health supports provided for students in a sample of New York State suburban schools and the percentages of these students that were provided home instruction for reasons of anxiety, depression, or school phobia. The study answered the following questions regarding mental health supports for these students:

1. What are the types of mental health supports available in suburban schools in NYS?
2. What is the percentage of students placed on home instruction due to anxiety, depression, or school phobia?

3. Is there relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?
4. Is there a relationship between the types of mental health supports and the percentage of students on home instruction due to anxiety, depression, or school phobia?

The availability of mental health supports in the participating districts was determined through the use of a researcher-developed survey. The survey was completed by 17 suburban school districts in NYS. The survey requested that each district identify the total number of students approved for home instruction during the period of September 1, 2010 to July 1, 2011. The survey also asked participants to rate the availability of programs, services, and interventions in the following ways:

1. Available to all students
2. Available to some students
3. Not available
4. If no, is this something your district needs

The mental health supports in the surveyed were categorized into three levels: Level 1 (Primary Prevention Supports); Level 2 (Early Intervention Supports); and Level 3 (Intervention for Chronic and Severe Problems).

This chapter is subdivided into three sections: summary of findings, conclusions and recommendations.

## Summary of Findings

**Frequency of mental health supports in suburban schools.** Research Question 1 asked districts what types of mental health supports were available to all of some of their students.

*Availability of supports categorized as Level 1 (Primary Prevention Supports).* The supports most frequently available to all students were general health education and drug and alcohol education. This was not unexpected, given that these supports are required by Part 135.2 (a) and Section 102 (c) of the Regulations of the Commissioner of NYS. Conflict resolution was available to all students in half of the districts. Before and after school homework programs and childcare programs were available to all students in less than half of the districts. Peer mentoring was available to all students in 13.3% of the districts but was available to some students in 80%. Positive Behavior Intervention and Support (PBIS) was available to all or some students in 60% of the districts. Almost 7% of the districts responded that the only support that was not available but needed was PBIS.

*Availability of supports categorized as Level 2 (Early Intervention Supports).* Level 2, early intervention, supports were most often provided by staff with specific training and skills (e.g., psychologists, social workers, guidance counselors or behavior specialists). The proportion of supports reported available to all students in Level 2 was higher than in Level 1. Approximately 63% of Level 1 supports were provided to half or fewer students, whereas only 22% of the Level 2 supports were offered to half or fewer students. The most frequent support available to all students was the Child Study Team (CST)/Pupil Services Team (PST) (100%).

The majority of the remaining supports were available to all students in at least two-thirds of the districts. School counselors and guidance counselors were the next most available

services to all students (86.7%). Each of these professionals provided some student counseling. School counselors provided group counseling on issues such as friendship, divorce, and conflict resolution to all students in 73.3% of the districts. Guidance counselors provided individual student counseling to all students in 80% of the districts.

Mental health supports offered through social workers were provided to a lesser extent than those by guidance or school counselors. Social workers were available to all students in 60% of districts, and 20% of the districts provided it to some students. A fifth of the responding districts (20%) indicated that they do not have a social worker available in the district. No respondents indicated that, if it was not available, it was needed. Social workers provided individual counseling to all students in 53% of the districts and to some students in 33.3%. However, group counseling was available to all students in less than half of the districts (46.7%) and similarly to some students (46.7%). The most frequent supports provided by social workers for all students were teacher consultation on classroom management strategies (73.3%) and behavior intervention plans (73.3%).

The least frequent support available to all students was family education on mental health concerns (40%). It was reported that family education on mental health concerns, anti-bullying curriculum, and group counseling were not available to either all or some students but was needed in 7% of the districts.

***Availability of interventions for Level 3 (Chronic or Severe Problems).*** The supports in Level 3 (Supports for Chronic or Severe Problems) were the least frequently available mental health supports to all students but were the most frequently identified as needed by the school districts. Crisis intervention teams at the building and district levels were available to all or some students in all of the districts. Consultants on mental health disorders were available to all

(20%) or some (60%) of students in 80% of districts. Psychiatric evaluation and assessment was available in two-thirds of the districts.

Collaboration with psychiatric hospitals was available to all students in 46.7% of districts and to some students in 26.7%. Specific collaborative venues (transition meetings, transition planning or educational programs) for students re-entering school from psychiatric hospitalization was available for all students in less than half of the districts (40%). All districts indicated that these collaborative supports with psychiatric hospitals were needed.

Mobile crisis teams were available to all or some students in 40% of districts, with 20% of the districts indicating that while this support was not available, it was needed. Community mental health services co-located in the district were available to all or some students in 33.3% of districts. One-fifth of districts reported that this support, while not available, was reportedly needed.

GED programs were available to some or all students in two-thirds of districts, but GED programs were not available to any students in 27% of districts, with 7% indicating that they were needed. Psychiatric nurse practitioner was the least available support with 60% of districts reporting it was not available to any students. Over half the districts reported that dropout re-entry programs were not available to any students, and 7 % of the districts indicated that this support was needed.

**Percentage of students on home instruction due to anxiety, depression, or school phobia.** Question 2 asked what is the percentage of students placed on home instruction due to anxiety, depression or school phobia. The average percentage of students placed on home instruction due to anxiety, depression, or school phobia ranged from 0 to 100% in the sample districts; the average percent was 16.2%.

**Relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression or school phobia.** Question 3 asked if there was a relationship between the level of mental health supports and the percentage of students on home instruction due to anxiety, depression or school phobia.

*Correlation to Level 1 (Primary Prevention Supports).* There were no significant correlations between the mental health supports provided in Level 1 and the percentage of students on home instruction due to anxiety, depression, or school phobia. No Level 1 coefficients were statistically significant at the  $p < .05$  level.

*Correlation to Level 2 (Early Intervention Supports).* There were three mental health supports within Level 2 that were significantly related to the percentage of students on home instruction due to anxiety, depression, or school phobia. The analysis showed a statistical significance ( $p < .01$ ) between family education on mental health concerns and the percentage of students placed on home instruction for reasons of anxiety, depression, or school phobia. As family education on mental health concerns becomes more available to all students, there is a greater likelihood that the percentage of students on home instruction for the reasons of anxiety, depression, and school phobia will increase. There was a statistically significant inverse relation ( $p < .05$ ) between group counseling provided by social workers ( $p(11) = -.72, p < .05$ ) and individual counseling provided by social workers ( $p(11) = -.62, p < .05$ ). The more group or individual counseling by social workers is available for all students, the more likely it is that the percentage of students on home instruction due to anxiety, depression, or school phobia will decrease.

*Correlation to Level 3 (Interventions for Chronic or Severe Problems).* There were six mental health supports within Level 3 that were significantly related to the percentage of students

on home instruction due to anxiety, depression, or school phobia. There was a statistically significant positive correlation ( $p < .01$ ) between the supports of crisis intervention teams ( $p(11) = .77, p < .01$ ), transition education programs for students re-entering from psychiatric hospitalization ( $p(11) = .74, p < .01$ ), and transition plans for students re-entering school from psychiatric hospitalization ( $p(11) = .62, p < .05$ ) and the percentage of students placed on home instruction for reasons of anxiety, depression, or school phobia. The correlations were also significant ( $p < .05$ ) between psychiatric evaluations and assessments ( $p(11) = .67, p < .05$ ), dropout re-entry programs ( $p(11) = .61, p < .05$ ), and community mobile crisis teams ( $p(11) = .72, p < .05$ ) and percentage of students placed on home instruction for reasons of anxiety, depression, or school phobia.

***Summary of supports related to percent of students on home instruction for reasons of anxiety, depression or school phobia.*** In summary, there were a total of nine mental health supports (three in Level 2 and six in Level 3) that demonstrated a statistically significant correlation to the percentage of students on home instruction due to anxiety, depression, or school phobia. Table 13 in Chapter 4 summarizes these results. The nine supports were: family education on mental health concerns; group counseling by social workers; individual counseling by social workers; crisis intervention teams; community mobile crisis teams; transition plans for students re-entering from psychiatric hospitalization; transition education programs for students re-entering from psychiatric hospitalization; psychiatric evaluations and assessments; and dropout re-entry programs.

These nine supports will be referred hereafter as a *suite of supports*. While a statistically significant relationship was revealed between this suite of supports and the dependent variable, the next essential question was to determine to what extent this suite of supports contributed to



the variance of the percentage of students on home instruction due to anxiety, depression or school phobia.

*Relationship between the types of supports and the percentage of students on home instruction due to anxiety, depression or school phobia.* Question 4 asked if there was a relationship between the types of supports and the percentage of students on home instruction due to anxiety, depression or school phobia. A linear regression analysis was run between the each of the nine supports and the percentage of students on home instruction due to anxiety, depression or school phobia. No significant results were found in this analysis ( $R^2 = .45$ ,  $F(7, 16) = 1.9$ ,  $p > .05$ ).

*Suite of supports and the dropout rate.* The only demographic factor that correlated at a significant level ( $p < .05$ ) to the percentage of students on home instruction due to anxiety, depression, or school phobia was the dropout percent for all students (.67). Therefore, an additional regression analysis was done to investigate each of the nine supports as predictors for dropout rate as the dependent variable or criterion. No significant results were found ( $R^2 = .16$ ,  $F(7, 16) = 1.3$ ,  $p > .05$ ). There may not be a direct relationship or contribution of the suite of supports to the dropout rate, but both the dropout rate and the suite of supports are related to the percentage of students on home instruction due to anxiety, depression, or school phobia.

In an attempt to understand why, given that each of the nine supports was previously correlated to the dependent variable, a post hoc bivariate correlation of the nine supports with each other was run. It appears that these supports are not independent of each other, so they confound the regression analysis. Similarly, they confound the analysis of the relationship between these nine supports and the dropout rate. In summary, while nine individual mental health supports have significant correlations to the percentage of students on home instruction

for reasons of anxiety, depression, or school phobia, no individual support can be identified that contributes to the variance of the rates of students on home instruction for the reasons described above.

### **Conclusions**

The results of this study suggest that availability of mental health supports provided to the subgroup of students impact the percentage of these students placed on home instruction.

**Conclusion 1 – There were significant differences in the availability of mental health supports in Levels 1, 2, and 3 the districts.** Approximately 63% of Level 1 supports were provided to half or fewer students. In Level 2 (Early Intervention) only 22% of the supports were offered to half or fewer students. The most frequent supports available to all students were the Child Study Team (CST)/Pupil Services Team (100%). The remaining supports in Level 2, early intervention supports, were available to lesser degrees to all students; however all of them were available to some students to varying degrees. The distribution of reported availability of Level 3, interventions for chronic or severe problems, supports showed much more variability than in the previous two levels of supports. This appears to be due to an increase in the degree of non-availability (not available and not available, but needed) of these Level 3 supports in districts. These supports were the least frequently available to all students. They were also the most frequently identified as needed by the school districts that responded to the survey.

**Conclusion 2 – Individual and group counseling provided by social workers correlates to the percentage of students on home instruction due to anxiety, depression, or school phobia.** There is a statistically significant inverse relation between individual and group counseling provided by social workers to the percentage of students out on home instruction due to anxiety, depression, or school phobia. Given this correlation, it is interesting to note that

districts reported that mental health supports by social workers were provided to a lesser extent than those by guidance or school counselors. Social workers were available to *all* students in 60% of districts, and 20% districts provided it to some students. A fifth of the responding districts indicated that they do not have a social worker available in the district. No respondents indicated that, if it was not available, it was needed.

**Conclusion 3 – Dropout rate correlates to the percentage of students on home instruction due to anxiety, depression, or school phobia.** The dropout rate for all students correlated to a significant level to the percentage of students on home instruction due to anxiety, depression, or school phobia. Given that the diagnostic criteria for this subgroup of students do not include cognitive delays, it would be expected that they would be capable of achieving a Regents diploma *if* they were accessing the full range of credit bearing courses. Home instruction was not designed to replace instruction provided in a full-day educational program for an extended period of time.

It may be expected that these students are at-risk for dropping-out. If they do dropout, they could be successful in a re-entry program. It was reported that such dropout re-entry programs were not available to all or some students in over half of the districts. However, districts indicated that this support was needed. In addition, another avenue for high school completion, the GED, was not available in one-third of the districts.

**Conclusion 4 – There are nine mental health supports that significantly correlate to the percentage of students placed on home instruction due to anxiety, depression, or school phobia.** These nine supports (family education on mental health concerns, individual and group counseling provided by social workers, crisis teams, psychiatric evaluations and assessments, dropout re-entry programs, transition plans for students re-entering from psychiatric

hospitalization, and transition education programs for students re-entering school from psychiatric hospitalization) correlate significantly to the percentage of students on home instruction due to anxiety, depression, or school phobia. The more these supports become available to all or some students, the greater the likelihood that the percentage of students on home instruction for reasons of anxiety, depression, or school phobia will increase.

Two of these supports (family education and psychiatric evaluation and assessment) may reflect an increased awareness on the part of parents and school staff of the severity of a student's mental health status. This increased awareness and/or evaluation may lead to a mental health diagnosis that results in home instruction for a period of time.

### **Recommendations**

Based on the findings of this study, the following recommendations are provided.

#### **Recommendation 1 – School districts need to invest wisely in effective supports.**

School districts are already committing significant resources to these issues presented by students with mental health disorders, so they need to invest wisely in the supports that are most effective. As more students have counseling by social workers made available to them, the percentage of students on home instruction due to anxiety, depression, or school phobia decreases. Individual and group counseling by guidance counselors or school counselors do not demonstrate the same directionality for their relationship to the percentage of students on home instruction due to anxiety, depression, or school phobia. This may be due to the specific training on mental illness and therapeutic intervention required of social workers versus guidance counselors or school counselors. Counseling skills do not appear to have the same impact across all disciplines for this particular subgroup of children and youth with mental illness. Counseling, by name only, is not identical in its effect. This is important for districts to note. As districts

reduce staff, eliminating social workers with the rationale that counseling for chronic or severe problems will still be provided to students by other staff is not validated by the results of this study.

Expert personnel are essential to this subgroup of students. These experts must be situated in the district in such a way as to be accessible to this population of students, their families, and their teachers. Just as importantly, as administrators struggle with the increasing non-attendance of these students and their medical treatment, having access to the right expertise for this population can make a significant difference. It is not just having any professional, psychologist, guidance counselor, or school counselor available. The difference for this population is access to individual and group counseling with a social worker.

In addition, the students seen by social workers for individual or group counseling may be those students who are at-risk of being placed on home instruction. Carefully monitoring this pool of students could give districts the opportunity to intervene earlier or more intensely to prevent placement on home instruction.

**Recommendation 2 – School districts should consider the availability of drop-out prevention or GED programs.** GED programs were not available to any students in one quarter of districts and over half the districts indicated that dropout re-entry programs were not available. Clearly, this population of students on home instruction could potentially be successful in achieving a diploma, but to do so, they will need access to either GED or dropout re-entry programs. In addition, another avenue for high school completion, the GED, was not available in one-third of the districts. It may be that GED programs have been eliminated in districts in the past two years of fiscal distress. However, given these results, districts may want to develop collaborative partnerships with community colleges or Boards of Cooperative

Educational Services to provide GED programs on site in the district or by distance learning. In fact, distance learning may be more accessible to students whose attendance may be intermittent due to their mental illness.

The study has shown that the dropout rate for all students correlated at a significant level to the percentage of students on home instruction due to anxiety, depression, or school phobia. Given that the diagnostic criteria for this subgroup of students do not include cognitive delays, it would be expected that these students would be capable of achieving a Regents diploma *if* they were accessing the full range of credit bearing courses.

Home instruction was not designed to replace instruction provided in a full-day educational program for an extended period of time. Therefore, it may be expected that these students are at significant risk not acquiring sufficient credits to graduate. If they do dropout, they could be successful in a re-entry program. Districts need to reconsider the availability of these programs for this subgroup of students.

**Recommendation 3 – When considering what supports should be provided as early intervention or for chronic or severe problems, districts should consider the students who require the nine supports (suite of supports) as at significant risk of being placed on home instruction for reasons of anxiety, depression, or school phobia.** While nine individual mental health supports have significant correlations to the percentage of students on home instruction for reasons of anxiety, depression, or school phobia; no individual support can be identified that contributes to the variance of the rates of students on home instruction for the reasons described above. As a *suite of supports* however, they were significantly correlated to the percentage of students on home instruction for reasons of anxiety, depression, and school phobia.

Since each one of the supports was similarly correlated to the percentage of students on home instruction due to anxiety, depression, or school phobia, it would be helpful for districts to view them as a group of supports, rather than individually. This means that the more this suite of supports is available to all or some students in a district, the greater the likelihood that the percent of students on home instruction will increase. Students who require these supports should be viewed as at significant risk of needed to be placed on home instruction. Districts should track the impact of each of these supports on the student's ability to attend school.

### **Recommendations for Future Research**

**Future research recommendation 1.** It is recommended that future researchers conduct a similar study using a larger sample to determine if any of the nine individual mental health supports have significant correlations to the percentage of students on home instruction for reasons of anxiety, depression, or school phobia. While there were significant correlations between the nine supports and the percent of students on home instruction for reasons of anxiety, depression, or school phobia, no statistical contribution to the variance was demonstrated. In addition, another independent variable (duration of time on home instruction) should be included in any future study to determine if any of the nine mental health supports that significantly correlated to the percentage of students on home instruction due to anxiety, depression, or school phobia are related to the duration of the time the student is out of school. This study could provide valuable information to school districts as they develop the levels of supports within their buildings, since this would enable them to develop the most effective supports, in terms of shortening the duration of time on home instruction, returning these students more quickly to a supportive learning environment, or helping them achieve a diploma.

**Future research recommendation 2.** It is recommended that future researchers conduct a study of the mental health supports that are provided by specific professionals (e.g., psychologists, social workers, guidance counselors, or behavior specialists) to determine if support provided by a specific professional correlates to the duration of time students are on home instruction.

Specifically, it would be helpful for districts to know whether the type of counseling available to students from guidance counselors, school counselors, or social workers has a greater impact on either the percentage of students placed on home instruction due to anxiety, depression, or school phobia *or* the duration of the time students are out of school on home instruction.

**Future research recommendation 3.** While 16% of the students on home instruction in this study were placed on home instruction due to anxiety, depression, or school phobia, the basis for these decisions is not known. Students with school refusal do demonstrate diverse behaviors, including those most closely associated with oppositional defiant disorder or conduct disorder (Kearney & Albano, 2004). It is recommended that future researchers explore the reasons why the remaining 84% of students were placed on home instruction. Understanding the make-up of the various subgroups within this population could further identify supports that remove the barriers to school attendance and learning.

## **Summary**

This research matters for a number of reasons. While therapeutic interventions are necessary for students who struggle with anxiety, depression, or school phobia, the truth of the matter is that getting to these interventions is difficult for these students and their families. Until the issues become crisis in scope, the most available help and interventions lie within the



boundaries of the school and district. It is important for districts to know what interventions may have a significant impact on the ability of these students to attend school where a full-day education is available. Districts need to know what supports may be effective and what supports are not appropriate to this population and make these decisions based on what is known to be effective. Given the fiscal constraints that districts will be dealing for the immediate and perhaps longer term, what is effective should be considered as budgets are developed.

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*Appendix A*

Survey of Mental Health Supports in Schools

**1. Survey of Mental Health Supports in Schools**

The following data is requested for the period of September 1, 2010 to the date of the survey completion. The total number of students approved for home instruction should include ALL students placed on home instruction for the defined time period.

The second data element reflects ONLY the number of students on home instruction because of anxiety, depression or school phobia.

Directions: This Survey of Mental Health Supports in Schools should take no more than 20 minutes to complete. Thank you for your cooperation.

**1. The following data elements are requested for the period of September 1,2010 to the date of this survey completion. The total number of students approved for home instruction should include ALL students placed on home instruction.**

**2. Number of these students for whom the reason for home instruction is anxiety, depression or school phobia.**

## 2. Part II.

Please respond to the following questions by checking the answer that most accurately reflects the availability of these supports in your district.

1. Available to all students
2. Available to some students
3. Not available
4. If no, is this something your district needs

### 1. 1.0 Primary Prevention

	Available to all students	Available to some students	Not Available	If no, is this something your district needs
1.1 General health education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.1.1. Drug and Alcohol Education	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.2 Conflict Resolution Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.3 Homework programs before or after school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.4 Peer Mentoring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.5 Character Educational Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.6 Before or After School Care Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
1.7 Positive Behavior Intervention and Support Program (PBIS)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**2. 2.0 Early Intervention**

	Available to all students	Available to some students	Not available	If no, is this something your district needs
2.1 Child Study team (CST)/Pupil Services Team (PST)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.1 Educational Team Meetings with Families	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.3 Family Education on Mental Health Concerns (depressions, suicide, anxiety, drug abuse, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.4 Anti-bullying Curriculum	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5 School Counselor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5.1 Group Counseling (friendship, divorce, conflict resolution)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.5.2 Social Skills Training	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6 Guidance Counselor	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6.1 Career Guidance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6.2 Individual Student Counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.6.3 Academic Planning and Counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7 Social Worker	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.1 Counseling-Group	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.2 Counseling-Individual	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.3 Teacher Consultation (individual student)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.4 Teacher Consultation (Classroom management strategies)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.5 Parent Consultation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.6 Coordinate Parent Referral to Community Agencies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.7.7 Behavior Intervention Plan for Student	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**3. Intervention for Chronic and Severe Problems**

	Available to all students	Available for some students	Not available	In no, is this something your district needs
3.1 Psychiatric Evaluation and Assessment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.1.1 Training for Staff (mental illness, psychotropic drugs, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.1.2 Psychiatric Nurse Practitioner Consultation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.1.3 Consultants on Mental Health Disorders (Mood disorders, oppositional defiant disorder, school phobia, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2 Crisis Intervention Teams	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2.1 Building Crisis Team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2.2.District Crisis Team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2.3 Community Mobile Crisis Team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.2.4 School Resource Officer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3 Collaboration with Psychiatric Hospitals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3.1 Transition meetings for students re-entering school from psychiatric hospitalization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3.2 Transition plans for students re-entering school from psychiatric hospitalization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.3.3 Transition educational programs for students re-entering school from psychiatric hospitalization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.4 Community Mental Health Services Co-located in the district	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.5 GED Program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.6 Drop-out reentry program	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Survey is completed. Thank you very much for your cooperation.

*Appendix B*

Initial Letter to Superintendents

Date

Address of Superintendent

Dear (Superintendent's name and title):

My name is Rita D. Levay, a doctoral candidate at the Educational Leadership program at Sage Colleges. I am writing to invite you to participate in a research study that investigates the relationship between the availability of mental health supports provided for students in schools and the rates at which students are placed on home instruction for reasons of anxiety, depression or school phobia.

The information gathered from this study will assist districts in the development and effective implementation of school based mental health supports for the specific population of students on home instruction. Your participation will add to the literature regarding school based mental health services and mental health problems associated with the growing problem of school absenteeism.

The research involves the completion of a brief survey and data the district already maintains on home instruction. In most districts the Director of Pupil Personnel Services or the Assistant Superintendent maintains this data. The researcher collects only aggregate data from your district and will not have access to the identity of individual students; therefore, the study will be anonymous. The results of the research will be reported in aggregate and may be published in a professional journal or presented at professional meetings.

If you choose not to participate or to withdraw from the study at any time, you may do so at any point without penalty.

Within the next two weeks, I will contact you by telephone to discuss the possibility of your participating. At that time, I hope to answer any questions that may arise. Prior to that, feel free to contact me at xxxxxx@sage.edu or my doctoral chairperson, Dr. Daniel Alemu at xxxxxx@sage.edu with any questions or concerns. I thank you for your consideration and hope to work with you in this study.

Sincerely,

Rita D. Levay  
Doctoral Candidate  
Sage Graduate Schools  
Albany, NY

*Appendix C*

Follow Up Email to Superintendents

From: "Rita Levay"  
Date: 05/12/2011  
To:  
Subject: Research Study on Mental Health Supports

May 7, 2010

Dear \_\_\_\_\_ :

I am following up on a letter I sent to you a few weeks ago in which I invited you to participate in a quantitative research study that is designed to investigate the relationship between the availability of mental health supports provided for students in 30 New York State suburban schools and the rates at which students are provided home instruction for reasons of anxiety, depression or school phobia. I will be completing this study under the direction of Dr. Daniel Alemu from the Sage Graduate Schools' Doctor of Education program.

It is intended that the information gathered from this study will assist districts in the development and effective implementation of school based mental health supports for the specific population of students on home instruction due to anxiety, depression and/or school phobia/avoidance.

The research involves the completion of a brief survey and data the district already maintains on home instruction. The researcher will receive the student data identifiable only as numbers on a survey. In addition, to maintain anonymity, the names of school districts will be altered. After the completion of the dissertation, the data will be destroyed.

If you choose not to participate or to withdraw from the study at any time, you may do so without penalty. If you wish to participate, please go to <https://www.surveymonkey.com/s/SchoolBasedMentalHealth>. The research involves the completion of a brief survey and data the district already maintains on home instruction. I am attaching a copy of the survey that you are being asked to complete.

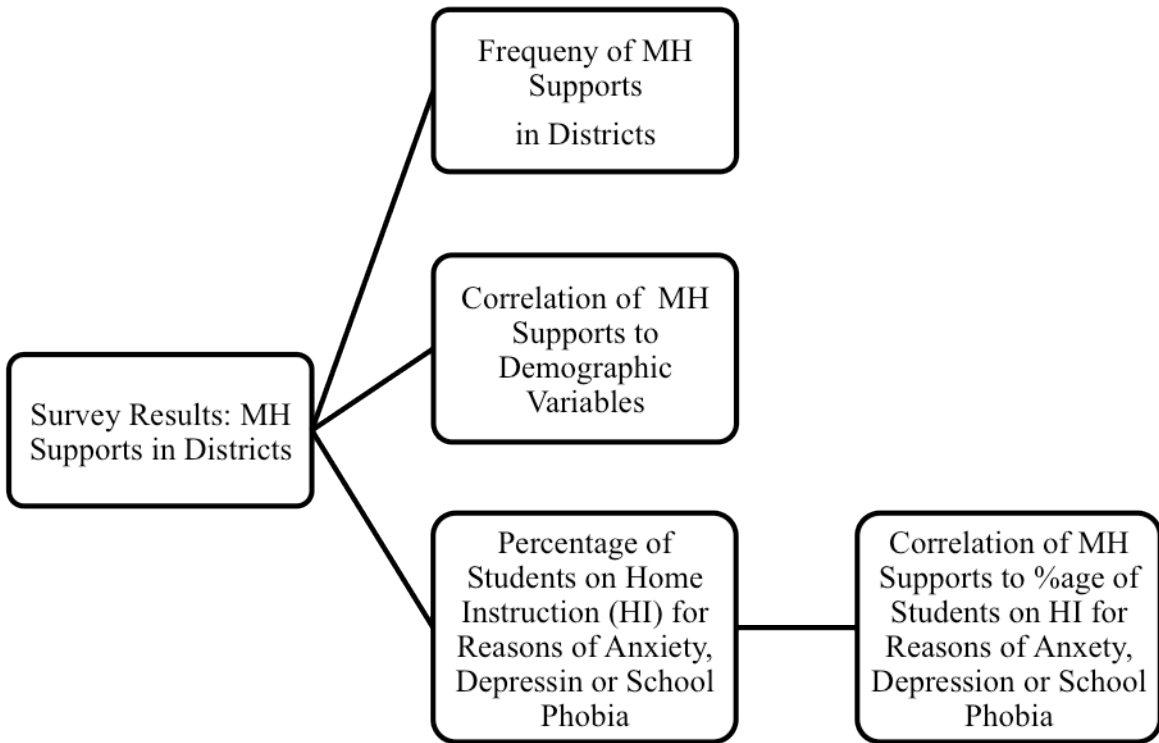
Prior to completing the survey, please feel free to contact me at xxxxxx@sage.edu or my doctoral chairperson, Dr. Daniel Alemu at xxxxxx@sage.edu with any questions or concerns. I thank you for your consideration and hope to work with you in my study.

Sincerely,

Rita D. Levay

Appendix D

Analysis Methods for Research Question Two





Appendix E

Decision Process for Analysis of Survey Results

