FACILITATING TYPE III INVESTIGATIONS TO MEET THE NEEDS OF HIGH ABILITY STUDENTS WITH BEHAVIORAL CHALLENGES

by

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(Under the Direction of Thomas P. Hébert)

ABSTRACT

Using a multiple case study design, the author observed the facilitation of Type III investigations (Renzulli, 1977) with five students identified as having high academic ability and documented patterns of challenging behavior and underachievement. Research questions investigated the factors that lead to underachievement and behavioral challenges for this population as well as the impact that participation in Type III investigations have on academic performance and behavior patterns. Strategies and methods utilized by mentor teachers who facilitated these investigations were also identified.

Findings indicated that participants' underachievement and behavioral challenges were related to a lack of interest and engagement in the standardized curriculum, boredom with assignments they regard as irrelevant, poor social skills, anger management issues, and poor family relationships and/or family adversity. During the course of the study, positive academic and behavioral gains were identified through interview data, pre and posttest BASC-2 data, student grades and behavior reports, and observations from teachers. Mentor teachers reported that certain strategies such as: active listening, collaborative problem solving, and sharing

personal experiences helped to establish rapport and build supportive relationships with the participants they collaborated with in this process.

INDEX WORDS: Gifted, Applied Projects, High Ability, Behavior Problems, Mentoring, Case Study

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DEDICATION

I dedicate this work to the loving memory of my mother and father, Loy and Don Davis, who left this life well before their time, and taught me more about life by courageously embracing their own deaths. They have been my constant companions in spirit as I have persevered through the past five years in pursuit of this dream. I know they would be proud.

I also want to make a dedication to my wife Ana and my three beautiful children Josselyn, Julia, and Jack. They give me the air that I breathe and have provided me a constant source of purpose, motivation, and optimism as I completed this process. I owe everything I have in this world to them.

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TABLE OF CONTENTS

LIST OF TABLES

Page

LIST OF FIGURES

Page

CHAPTER 1

INTRODUCTION

Most people have likely never given much thought to the dilemma of what to do with schools' most challenging students. Most of the attention given to students is reserved for those whose achievements and accomplishments reflect the success and prestige that society would like to bestow upon the institution of public education. Students who cause problems and get into trouble by being disruptive and disobedient are viewed as potential obstacles to the learning of others. Common notions like, "spare the rod, spoil the child" seem to permeate attitudes when it comes to dealing with young people whose behavior disturbs the school environment, makes administrators uncomfortable, or is out of the norm of acceptable behavior (Gallagher, 1997). This philosophy, however, has created a hostile climate for students whose behavior is not conducive to learning. Furthermore, many of the most talented and brightest students find themselves at the forefront of this dilemma as their behavior and school performance fails to live up to their potential (Hallahan & Kaufman, 1991; Reid & McGuire, 1995).

Consider for a moment the following well known examples. Will Smith and Jim Carey, who exemplify high potential and talent, were both regarded as being challenging students in school. In a biography on Smith, several references are made to his reputation as being a challenge at school. It was reported that, "Smith was a good student whose charming personality and quick tongue were renowned for getting him out of trouble." (http://www.thebiographychannel.co.uk/biographies/will-smith.html) Highlighting his interest and desire to continue on to higher education Smith commented: "My mother, who worked for

the School Board of Philadelphia, had a friend who was the admissions officer at MIT. I had pretty high SAT scores and they needed black kids, so I probably could have gotten in. But I had no intention of going to college." (http://www.thebiographychannel.co.uk/biographies/will-smith.html)

Similarly, Jim Carey also demonstrated a penchant for "pushing the limits" at school. His teachers reported on his constant need and desire to be the class clown. To help the young Jim manage his antics in junior high, "he was granted a few precious minutes at the end of each school day to do stand-up routines for his classmates provided, of course, that he kept a lid on it the rest of the day". (http://www.imdb.com/name/nm0000120/bio). Carey, like Will Smith, decided not to pursue higher education. It makes one think about how these men's lives and careers could have been different if they had not been allowed to express their creative energy in a positive manner. For many students like these two famous men, the school community does not always appreciate and support such displays of humor and wit, and many challenging students find themselves in a pattern of failure.

Sadly, the current state of affairs and prevailing attitudes of the education establishment continues to contribute to this educational dilemma. This continuation is a reflection and manifestation of the punitive philosophy that more and more school systems have adopted, which propose strict codes of conduct and discipline policies for students who break the rules. Despite the popularity of these "zero tolerance" policies, little thought or attention has been given to addressing the underlying emotional, behavioral, or psychological functions of problematic behavior that are at the heart of this issue (Skiba & Peterson, 2000). Another troubling dimension of these policies is that disciplinary actions and office referrals for the most defiant and disruptive behavioral infractions are administered in a disproportionate manner when

viewed from a racial and socioeconomic perspective. Minorities and students from low socio-economic status backgrounds constitute a disproportionate amount of behavior referrals in public schools (Kemp, 2006).

Although there have been considerable research efforts aimed at reducing problematic behavior in schools, and much has been learned about many of the precipitating factors for problem behavior, little has been done to incorporate this knowledge or awareness into the decision making aspect of the discipline process (Nogeura, 1995). The absence of a mechanism or strategy to address underlying causes of behavior problems places many students at odds with teachers and school administrators, which over time, becomes a perpetually negative cycle of behavior problems. This has particularly been the case for high ability students who exhibit troublesome behavior. When schools are unable to respond proactively to maladaptive patterns, most affected students begin to underachieve, disengage, or drop out of school all together (Kemp, 2006). This is not a promising outlook for all students, but it is especially disheartening to see so many of the brightest and most talented students fail to complete their education and reach their potential when there are so many other options and avenues that schools can utilize to more effectively address the myriad of needs that high ability students possess (Reis & McCoach, 2002). Not only are students' emotional and behavioral needs being ignored, but a continuing drop out crisis is developing as punitive policies are implemented in more and more schools (Wagner, 1991).

Statement of the Problem

The high school drop-out crisis is one of the most urgent concerns and challenges facing policy makers and educators (Phelan, 1987). A Nation at Risk (National Commission on Excellence, 1983) reported that as many as 20 percent of the nation's dropouts are gifted.

Current estimates reveal that the national drop-out rate for students without disabilities is between 25-35% depending on which calculation method is used (Kemp, 2006). The percentage of students with disabilities who drop out before graduation is even greater. Estimates of drop-out rates are between 52-59% for those with emotional disorders, and 32-37% for students with learning problems (Sinclair 1994; Wagner, 1991). Another reality of this crisis is that many of those who eventually graduate do so without being adequately challenged and may not be prepared to achieve their full potential beyond the high school classroom (Siegle & McCoach, 2001). Many students who drop out and are under challenged display problematic behavior in the school setting (Reid & McGuire 1995). High ability students who exhibit challenging behavior can be found in special education as well as in the general education classrooms. The underachievement and lack of school engagement is a cause of major concern.

Students with high potential and behavior problems pose a unique challenge for educators as the causes and factors that can lead to behavior problems are varied and complex. Underachievement and challenging behavior manifest differently depending on the cause or function of an individual student's lack of engagement and frustration. Some of the most frustrated students exhibit problematic behaviors that interfere with their learning and the learning of others (Hallahan & Kauffman, 1991). Students with emotional behavioral disorders (EBD) are more likely to display disruptive classroom behavior (Thurlow, M. L., Sinclair, M. F., & Johnson, D. R., 2002). The overarching concern is that many of the most capable students are not fully engaged or motivated to participate successfully in school. Reversing the underachievement of high ability students has been the focus of many researchers in the field of education (Baum, Renzulli, & Hébert, 1995; Butler-Por, 1987; Dowdall & Colangelo, 1982; Emerick, 1992; Hébert, 2011; Redding, 1990; Rimm, 1997; Supplee, 1990; Whitmore, 1980;

Wolfle, 1991). This study will focus on issues related specifically to high ability students who exhibit challenging behavior at school. Talented students underachieve for many reasons and under many different circumstances. Unfortunately there is no universal strategy or method for how to reverse underachievement in students whose talents are demonstrated in diverse ways (Reis & McCoach, 2002).

Determining why some high ability students demonstrate low levels of achievement and problem behavior is difficult because underachievement and behavior problems occur for many reasons. Reis and McCoach (2002) suggest that in the majority of cases, underachievement for high ability students occurs for one or more of three main reasons: physical, cognitive, or emotional issues; a mismatch between the student and his or her school environment; and personal characteristics such as low self-motivation, low self-regulation, or low self-efficacy. These same factors also have salience in understanding why students with emotional and behavioral challenges struggle to thrive in the school setting. Davis and Bull (1988) suggested that gifted children and adolescents tend to be more self-sufficient, non-conformist, and exercise more free and independent thinking. Many other researchers in the fields of gifted education and special education have observed and reported similar character traits that have been linked to high ability students (Bianco, 2005; Frasier, Garcia & Passow, 1995; Reis & Neu, 1994). These kinds of personality traits however, can present challenges for students in the highly structured, conformist world of the classroom.

It is not surprising that very few, if any, students with Emotional and Behavior Disorders (EBD) or Attention Deficit Hyperactivity Disorder (ADHD) are referred for gifted programs as their most prominent behaviors and traits are perceived as negative. Gallagher (1997) found that students in this population were often referred to as suffering from the “Destructive D’s” that is,

"dysfunctional, difficult, deviant, disordered, disturbed, disappointing, delinquent, dropout, disruptive, and disorganized" (p. 2). Some of the most notable gifted and creative people in history were probably viewed in the same manner (Gallagher, 1997).

As schools curriculums move increasingly toward standardization, more emphasis is placed on testing, rote memorization, and standardized curricula (Noddings, 2007). This lack of curricular diversity and challenge is often stifling for high ability learners and can have a compounding effect on the other variables and causes that influence underachievement and challenging classroom behavior (Reid & McGuire, 1995; Reis & McCoach, 2000). Each of these variables for underachievement requires its own approach and intervention. Educators need to be aware of the alignment between an intervention and the relevant cause of the underachievement. This research study attempted to simultaneously address multiple causes in a manner that takes into consideration the individual circumstances and needs of students.

Purpose of the Study

The purpose of this study was to investigate the effectiveness of using Renzulli Type III enrichment (Renzulli & Reis, 2008) with high ability students who exhibit challenging behavior. Type III experiences start by identifying student interests and strengths through the use of interest inventories. Students then select a specific area of interest for further exploration and research. As students delve deeper into their chosen area of study, they identify a problem or need that they can solve or address through the creation and implementation of an applied project. The goal of this project was for the student to be able to work to produce a product in their desired area of interest commensurate with a professional from that same domain. To the extent possible, the students used the same methods as a professional would in terms of content, process, and product. The end result was an applied product or service that addressed a real

world problem. The study also hoped to provide insight into the functions and causes of underachievement and behavior problems of this population which can be influenced within the school setting. The goals of this study were accomplished by engaging students in self-selected endeavors in which they were able to develop skills in an area of strength while simultaneously developing a meaningful mentor relationship with the researcher and other staff facilitators who were lending their professional expertise as needed to assist the participants in completing their Type III projects. The intended final outcome of this experience was that the participants would demonstrate improved classroom behavior, social functioning, and academic performance.

Research Questions

The following research questions guided this study:

- What factors contribute to underachievement in students with high ability and behavioral challenges?

- How does pursuing a Type III investigation affect underachievement patterns in students with high potential and challenging behavior?

- What specific pedagogical, instructional, or mentoring strategies enhance the experience of pursuing Type III investigations with high ability students with behavioral challenges?

Significance of the Study

While the use of Type III investigations with gifted students is well established (Renzulli, 1977), their use has not been established as common practice for students with challenging behavior. The lack of effectiveness of the more prevalent punitive models of behavior management and discipline, as well as the potential role that they may be playing in exacerbating the nation's drop out crisis, makes identifying an alternative and more effective way of addressing problematic behaviors through the identification of talents and strengths of paramount

concern. This study identified participants who had documented patterns of challenging behavior that had been previously addressed by traditional strategies of seclusion (in-school suspension), exclusion (out-of-school suspension) and punishment (loss of privileges, verbal reprimands, and negative phone calls to parents or guardians). This study attempted to demonstrate that patterns of maladaptive, disruptive, and defiant behaviors could be reduced or eliminated when students were able to work in an area of strength and interest while also developing a positive and supportive relationship with a caring adult in the school setting.

Subjectivities and Assumptions

I have a personal connection to the described population of students and proposed study. When I was in elementary school, I was a behaviorally challenged student who was served in the gifted program. When I entered middle school, I no longer wanted to be labeled as gifted for fear of social repercussions so I dropped out of the program. During middle school, I continued to display challenging behavior and experienced constant boredom and frustration. My grades were poor and I experienced numerous disciplinary referrals. I hated school. When I entered high school, I reluctantly became involved in athletics at the urging of one of the coaches. The decision to participate in athletics changed my life. The relationship that I developed with my soccer coach throughout my high school years had an enormous impact on my social, behavioral, and academic performance. I had a successful high school experience due in large part to my coach, who became an unwitting mentor. My experience has taught me how powerful such a relationship can be in reversing underachievement and helping someone reach their full potential. This experience also reminds me of how important it is to be able to do something you are good at on a daily basis. So many high ability students are not afforded the chance to excel in an area of strength at school.

As a special education teacher, I have a very strong interest and desire to learn as much as I can about the challenging behavior and underachievement of high ability students with emotional and behavioral problems. In my experience working with students with emotional and behavior disorders, I have seen numerous examples where students' behavior, participation in school, and overall affective demeanor have improved when they have been able to participate in and experience relationships, interactions, and activities that parallel the experience of a Type III intervention. Because many of the students I have worked with are in special education, their instruction has been focused on remediating deficits and working on IEP goals and objectives. Most of these students never have the opportunity to participate in an opportunity like a Type III intervention.

Even the high ability students I have worked with who exhibit challenging behavior have been routinely left out of, or not been eligible to participate in, extracurricular activities or opportunities that would mirror components that an intervention such as this would afford. I believed that the self-selected nature of this intervention and the challenge and complexity involved in creating a real world product, along with the mentoring and peer group experience, would only have a positive impact on a student whose primary deficits are affective in nature.

During this study, I was employed as the coordinator for the special education department at the school where the data were collected. Having worked in this capacity for the past two years, I had developed relationships and rapport with staff and students. I also had the opportunity to be acquainted with some of the students' parents, which provided me an increased understanding of the students who participated in this research. This study provided many advantages for me as a researcher and for the student participants as well. I also believe that everyone who was involved in this experience benefited personally and professionally. I hope

that the results of this study will inform future research and instructional efforts that aim to help students in this target population. Ideally, Type III enrichment can become the norm for all students. This study can be a step in that direction.

Scope and Limitations

The focus of this study included four adolescent males and one adolescent female between the ages of 14-17, who had three or more office referrals in the previous school year for defiant, disruptive, disrespectful or otherwise non-compliant behavior. All 5 participants also possessed documented high potential as determined by standardized test scores and/or current or past participation in the school's gifted education program. Four participants were of European-American decent, and one was of African-American decent.

While qualitative research does not claim generalizability, it does suggest that meaningful, useful inferences may be drawn from the collected discoveries and shared findings of a body of literature examining the same topic. The application of this study's findings to others of a similar nature may be particularly limited by the sample size, regional influence of being in a school located in the southeastern United States, and the researcher's role as an administrator in the school where the study was conducted.

CHAPTER 2

REVIEW OF THE LITERATURE

The review of literature that supports this study can be viewed as a cross-section of gifted and special education. Students with potential gifted abilities who also possess academic or behavioral deficits are referred to as Twice Exceptional (2E). To effectively address the unique needs of this population, strategies from gifted education and special education are often implemented simultaneously. The literature review will describe common efforts and methods from both of these educational fields. In addition, to lay the foundation for using a Type III investigation with students exhibiting challenging behavior, a review of past and current methods of traditional behavior management techniques and philosophies will be provided.

Current and Historical Trends in Managing Challenging Behavior

Students who exhibit challenging behavior in school have always presented challenges for educators. The efforts to improve student behavior and discipline have been well documented in the research literature (Hallahan & Kauffman, 1991; Wagner, 1991; Gallagher, 1997; Skiba & Peterson, 2000; Kemp, 2006). When reviewing this literature as it applies to high potential students with challenging behavior, there is no distinction made for social, emotional, or intellectual traits or needs when describing behavioral and disciplinary strategies that would be used by educators and administrators (Reid & McGuire, 1995; Skiba & Peterson, 2000). To set the stage for the literature based support and practices that have been identified for the population of this study, it will be necessary to review practices and strategies that have been utilized by teachers and administrators to address and remediate maladaptive behavioral and

social patterns that interfere with student learning and achievement. What follows is a review of accepted best practices that special educators and general educators use to manage behavior and some of the practical issues that can prevent them from being successful. To put the literature and practices into perspective, it will also be necessary to provide the counter point of these effective strategies by highlighting methods and policies that have been demonstrated to be ineffective in remediating the poor behavior patterns which lead to eventual underachievement. Finally, to bring it all together, a discussion will be presented regarding what the literature from gifted education recommends is best for this population of students.

Traditional Approaches of Behavior Management

The research literature that encompasses the debate about how teachers should handle problematic school behavior is not new. Teachers have always had to endure the daily task of managing challenging behavior of students that interferes with the safety and learning of others. Many of the most frequent classroom discipline problems observed in schools today are the same ones that have plagued teachers for centuries: teasing, talking without permission, getting out of one's seat, disrespect toward teachers, and bullying (Elam et al., 1996; Gallagher, 1997). What follows is a synopsis of current practices which have been reported as the most commonly used by teachers and administrators (Skiba & Peterson, 1994; Smink & Schargel, 2004; Hallahan & Kaufman, 2011).

Punishment.

The efficacy of positive consequences for managing student behavior has been widely demonstrated (Gottfredson, Gottfredson, & Hybl, 1993; Nelson, 1996). Regardless, when most teachers and administrators are faced with disruptive and aggressive behavior, they respond with punishment and exclusion (Skiba & Peterson, 2000). The failure to balance positive and negative

consequences may give way to a coercive cycle that increases the likelihood of disruptive behavior (Shores, Gunter, & Jack, 1993). Despite that reality, negative consequences appear to outpace the use of positive reinforcements, both in general education (Gable & Hendrickson, 2000) and special education (Gallagher, 1997; Knitzer, Steinberg, & Fleisch, 1990). A search of the behavioral and disciplinary literature reveals that punitive and exclusionary actions by teachers and administrators such as: withholding or removing privileges in the absence of positive reinforcement for successful outcomes, time out (seclusion), and suspension (exclusion) may be effective in the short term but eventually only perpetuate maladaptive patterns of behavior that can lead to underachievement and school disengagement over time (Gallagher, 1997; Skiba & Peterson, 2000; Kemp 2006). Furthermore, the over reliance of these strategies may provide a reduction of specific behaviors in selected settings, but these practices alone will ultimately do nothing to address underlying causes of problematic behavior problems (Gallagher, 1997; Gallegos, 1998). The target population for this study represents a group that is all too familiar with punishment, which for them has been a frequent reality of their school experience.

Zero Tolerance Policies.

One example of practice that is indicative of this philosophy and trend toward punishment and exclusion is zero tolerance. The past 20 years have seen a dramatic increase in the promulgation of zero tolerance school discipline policies. Relying primarily upon school exclusion (suspension and expulsion) and school security measures (e.g., metal detectors, video surveillance, and locker searches), zero tolerance policy tends to punish both major and minor incidents severely in order to "send a message" that certain behaviors will not be tolerated (Skiba & Peterson, 1999). Since the passage of the Gun Free Schools Act (1994), federal policy has adopted a zero tolerance approach for firearms, mandating a one-year expulsion for their

possession on school grounds. Some school districts have extended zero tolerance even farther to fighting, homework completion, or even off-campus behavior (Sprague, Smith, & Stieber, 2002). Although suspensions and expulsions for apparently trivial incidents such as possession of cough drops or nail files have fueled controversy over zero tolerance (Skiba & Peterson), many districts continue to toughen their disciplinary policies ("Groups critical of no second chances," 1999).

Noguera (1995) has argued that stringent disciplinary policies are adopted less for their effectiveness than for their symbolic value, attempting to reassure administrators, parents, and teachers that strong actions are being taken in response to a perceived breakdown of school order. This has unfortunately become more and more common as school systems attempt to meet accountability demands from federal and state departments' of education in the era of No Child Left Behind (NCLB). Schools are reacting to situations and public demands at the expense of developing thoughtful methods and policies for intervening in and addressing challenging behavior (Noguera, 1995). This has led to a tremendous shortfall in meeting students' needs. The results of this study will hopefully shed some light on how this can be remedied.

Social Cost of Alternative Environments.

The advent of NCLB and the accompanying zero tolerance policies that seek to bring order to the learning environment have increased the use of alternative environments for punitive and educational purposes (Kemp, 2006). Many of these placements are made based on local policies that require certain amounts of alternative placement for certain offenses. Special education, in particular, enables teachers to provide different levels of service outside of the general education classroom depending on the needs of a student (Hallahan & Kaufman, 2011). One of the primary considerations in deciding to use an alternative setting is determining the function and etiology of the interfering behavior. Research has shown that there are many causes

and precipitating factors for problematic behavior problems (Kauffman, 1993). Research based strategies take into account the effects of precipitating factors and incorporate them into intervention development. Many challenging students have experienced, or are subject to, emotionally damaging life events within the family and or community which are unable to meet their needs (Davis & Bull, 1988; Wagner, 1991; Hallahan & Kauffman, 1991, Baum, Renzulli & Hébert, 1995; Smink & Schargel, 2004; Hébert, 2011). This leads to academic and behavioral deficits that can lead to failure and follow them throughout life (Ruhl & Berlinghoff, 1992).

Unfortunately, many of the methods and strategies implemented in schools and classrooms for these students results in greater marginalization and alienation from settings and peer groups that would stand a better chance of fostering improved academic achievement and behavior. This is particularly true with the use of alternative environments and alternative placements. Many students have social and emotional needs that require the occasional "shelter" that a separate environment can provide.

For those students whose behavior is severe enough, specialized interventions and occasionally separate placements are required in order to enable them to access the curriculum and benefit from schooling. For students in general education, this often means placement in an alternative school or expulsion (Skiba & Peterson, 1999). Challenging students in special education may be placed in separate classes for certain times of the day. Special education students with the most severe behavior, who are often labeled with an Emotional and Behavioral Disorder (EBD), are frequently "self-contained" for the entire instructional day. Over the last three decades, the use of separate environments has decreased as many states and school systems have acknowledged that keeping these students secluded does not provide them the academic and social skills to be successful in the mainstream environment (Hallahan & Kaufman, 2011;

Cook & Schirmer, 2003). The goal should always be to seek their re-integration into the mainstream environment. The relationships and social awareness gained from the mainstream class provides the best chance for students to remediate these deficits and avoid future failure (Meadows, Neel, Scott, & Parker, 1994).

In summation, alternative environments can be a part of a balanced plan for meeting a student's emotional and behavioral needs. When used incorrectly, these settings can become exclusionary and lead to academic and social marginalization but when used diligently, they can provide a great refuge and scaffold from which a student can remediate academic and social skills and or spend quality time building rapport with a teacher. Type III investigations rely, in part, on this type of environment since inevitably the student and mentor will work together in an "outside the classroom" arrangement. In terms of positioning the use of alternative environments on the spectrum from desirable to undesirable, that determination has to be made by considering the costs, benefits, and motives of relevant stakeholders and student needs .

Relationship to School Dropout

Much has been learned about the shortcomings of punitive and exclusionary policies and behavior management methods. The short term consequences of this kind of philosophy are easy to identify but one of the challenges in attempting to shift the policy pendulum away from punishment and seclusion is that the most destructive and far reaching consequences are not so easy to see. The most troubling result of long term punitive and exclusionary practices is that they inevitably lead to an increase in student alienation and disconnection from school that leads many chronic offenders to drop out (Jenkins, 1997). School suspension has been consistently found to be a moderate-to-strong predictor of school dropout. In the High School and Beyond study, over 30% of sophomores who dropped out of school had been suspended, a rate three

times that of peers who stayed in school (Ekstrom, Goertz, Pollack, & Rock, 1986). Indeed, the relationship between suspension and dropout may not be accidental. In ethnographic studies, school disciplinarians report that suspension is sometimes used as a tool for pushout, to encourage "troublemakers," or those perceived as unlikely to succeed in school, to leave (Bowditch, 1993). Research from the field of developmental psychopathology may help explain the relationship between suspension and school dropout. Throughout the elementary school years, students at risk for developing antisocial behavior exhibit disruptive behavior and experience social and academic deficits that increasingly alienate them from teachers and peers (Patterson, 1992).

By middle school, these youngsters become less interested in school and begin to seek out other antisocial peers. At the same time, their families often fail to monitor their whereabouts, allowing more unsupervised time on the streets (Ramsey, Walker, Shinn, & O'Neill, 1989). For such a student, it seems unlikely that school suspension will successfully impact behavior. Rather, suspension may simply accelerate the course of delinquency by providing a troubled youth with little parental supervision a few extra days with deviant peers. Research in the field of juvenile delinquency suggests that the strength of the school social bond is an important predictor in explaining delinquency (Jenkins, 1997). From a developmental standpoint then, one must question the wisdom of school exclusionary strategies that are expressly intended to break that bond with troublesome students. In summation, the detrimental effects of punishment and exclusion, whether within or outside of the school setting, cannot be ignored. What follows is a discussion of another shortcoming of administrative disciplinary policies that negatively impact students with chronic behavior issues, which centers on the challenge of equitable implementation.

Unfair and Inconsistent Usage of Discipline

One of the more widely replicated findings in the field of behavior management is the key importance of consistency in the administration of consequences (Wehby, Symons, Canale, & Go, 1998). Yet, research on the application of school discipline suggests that unfair and inconsistent application of disciplinary measures is common, and that school attributes make a strong contribution to predicting which students are disciplined. In an ethnographic study, Brantlinger (1991) reported that disciplinary sanctions at the secondary level were perceived to be unfairly targeted at low-income students by both high and low income students. This highlights another problem with punitive discipline codes that do not attempt to address the causal factors that underlie problem behavior.

It has also been noted that the implementation of discipline policies is prone to discriminatory inconsistencies which reveals an even more damaging shortfall of these traditional punitive efforts (Bowditch, 1993; Skiba & Peterson, 1994; Smink & Schargel, 2004). To highlight the problem of inconsistent implementation, the data for national school office referrals shows a disturbing trend where minorities and students with disabilities receive more frequent and severe punishments that further put them at risk for academic, social, and behavioral failure (Smink & Schargel, 2004). Finally, many of these punitive and exclusionary approaches become closely aligned with, and precursors to, the drop out culture especially for students with exceptionalities, including those with high ability (Bowditch, 1993; Thurlow, Sinclair & Johnson, 2002, Smink & Schargel, 2004). In short, the current and most commonly used strategies and approaches may be reaping short term relief for teachers and administrators at the expense of maintaining and reinforcing negative patterns that can have far reaching implications and adversely impact the future outcomes of the most challenging students.

Self-Fulfilling Prophecy

An important consideration that relates to how traditional behavioral methods and policies are implemented is the relationship and interaction of the attitudes and beliefs of individual students and the attitudes and beliefs of teachers and administrators. All stakeholders' and participants' beliefs and actions in the school community have a direct influence and, at times, can be antecedents in themselves for the kinds of behaviors that tend to illicit punitive responses. Students with chronic behavior problems and those labeled EBD are more frequently judged by others to be disruptive, insolent, disobedient, and disrespectful (Gallagher, 1997). These behavioral and social difficulties directly affect students' academic development, their peer and social interactions, and their self-esteem. When compared to peers without the EBD label or a reputation for being "bad," identified students tend to be less engaged, more likely to display off-task behaviors, more impulsive, uninvolved, and inattentive (Shores, Gunter, & Jacks, 1993). Others have reported that these students may be known to waste time, accomplish little, and require increased instructional attention and effort from teachers. The end result is often incomplete school work, lack of instructional gains, and frustrated educators (Smink & Schargel, 2004). Even though the picture of what problematic behavior looks like may be the same whether one is involved in special education or general education, the approaches utilized by educators in these two distinct areas are quite different, each with its own attributes and shortcomings. One of the shortcomings that both sides share is an inability to put solid research to practice. This gap is where the population of students in this study gets left behind.

Research to Practice Gap

Despite the abundance of effective strategies that have been documented (Hallahan & Kauffman, 1991; Nelson. 1996; Horner & Carr, 1997; Gallager, 1997; Smink & Schargel, 2004),

the gap between research and practice is a continuing issue in the professional literature (Reid & McGuire, 1995; Gersten, Vaughn, Deshler, & Schiller, 1997; Bianco, 2005). The areas of school discipline and behavior management are at the heart of this gap, which leaves schools with scarce resources to cope with current problems. Research in the fields of applied behavior analysis (Horner & Carr, 1997), teacher effectiveness (Emmer, 1994), and special education (Nelson, 1996) has recommended effective strategies of individual programming, classroom management, and instruction to improve the behavioral climate for students with and without disabilities. Unfortunately, there is solid evidence that such strategies are significantly underutilized in the public schools (Cook & Schirmer, 2003).

The difficulty of putting research into practice in general and special education has been a serious concern for some time (Cook et al., 2003). The research-to-practice gap continues to hinder student outcomes, has major negative implications, and presents significant obstacles for students with challenging behavior (Cook et al., 2003). An example of this is the fact that many general education teachers still fail to provide differentiated instruction for students with disabilities, although effective research-based strategies in this regard have been developed (Schumm & Vaughn, 1995).

There is extensive research in the field of special education identifying effective practices that have the potential to improve the school outcomes of students with and without disabilities. Unfortunately, research has also suggested that implementing and sustaining these strategies over time has proven to be extremely challenging (Schumm & Vaughn, 1991). For example, MacDougall (1998) suggested that general education teachers typically do not incorporate

frequent and ongoing evaluations of student performance and behavior, which are vital to support improvements in instruction and to improve educational outcomes for students, especially those with challenging behavior.

The research literature offers several explanations for the research-to-practice gap. Mostert and Crockett (1999-2000) suggested that many teachers are often confused about which practices and strategies have empirical support and which do not. Many teachers who implement research-based strategies find the process overwhelming. This leads to a lack of fidelity during implementation and ultimately can lead to premature abandonment. Additional findings suggested that teachers were either unaware of research-based strategies or dismissed them as inappropriate for their students (Greenwood, 2001).

Other impediments in delivering best practices in general education include inadequate training for teachers to successfully implement designated strategies, a concern for a perceived lack of efficacy when expected outcomes did not come to fruition, and concerns about the feasibility of instructional accommodations and modifications for students with disabilities (SWD), who only account for a fraction of the students served in the general education setting and may interfere with the academic achievement of their non-disabled peers (Schumm & Vaughn, 1995).

Klingner (2003) also identified five additional barriers that prevented teachers from incorporating research-based strategies into their classrooms. Lack of instructional time was the primary barrier when implementing new strategies. Other barriers reported by Klingner were inadequate resource materials, lack of support from administration, personality differences, and student behavior problems. According to Cook and Schirmer (2003), these reasons severely limit the positive effect of research-based interventions. This impediment to putting good research into

practice continues to place students who require specialized interventions and instruction at risk for failure. Regardless of the impact that the research-to-practice gap has had on implementing best practices for students with EBD and other challenging behaviors, there is no shortage of efforts and strategies that show promise in meeting student needs in the mainstream setting. That said, these methods are cause for hope that if and when the research-to-practice gap closes, more effective practices can be put into place to address the most challenging and high potential students.

Behavior Management in Special Education

The punitive behavior management strategies and zero tolerance discipline have been discussed along with some of the relevant issues and trends that provide a context for understanding their use and perceived effectiveness or ineffectiveness. As this discussion and review is intended to bridge the twice exceptional gap, it is necessary to discuss behavior management from the perspective of special education, keeping in mind that the development of effective interventions, such as the use of Type III investigations for this study, strives to be informed from both sides of the exceptionality spectrum.

One of the fundamental premises of special education is that students with disabilities can achieve and progress in the general curriculum with non-disabled peers if appropriate goals and objectives are set and individualized modifications and accommodations are provided so that a student's achievement and learning are not impacted by his or her disability. In the area of supporting student behavior, the primary goal of any individual plan is to support the student in the management of their own behavior (Hallahan & Kaufman, 1991). Teachers can use a variety of methods and strategies to facilitate this independence. The concept of self-management is a core foundation of academic, social, and behavioral independence.

Self-Management

Self-management is any process that an individual uses to influence his or her behavior (Carter, 1993) and has been promoted as an important strategy to enhance independence and decrease challenging classroom behaviors. Self-management strategies have been applied across a wide range of academic and non-academic environments (King-Sears, 1997). Most practitioners agree that self-management is best conceptualized as a continuum from external teacher control to internal student control. The overall goal is for the student to operate to the fullest extent on the internal control end of this continuum.

The literature on self-management guidelines cites eight basic principles that guide this process. It is suggested that practitioners do the following: (1) conduct careful, ongoing assessment of environmental and social expectations, including those that have been termed the "hidden curriculum," (2) precisely operationalize definitions of target behaviors, (3) carefully establish student-specific performance criteria that address general curriculum guidelines as well as the student's Individualized Education Program (IEP), (4) determine the basis for the student's behavioral discrepancies, (5) clearly establish behavior objectives and develop and implement intervention programs, and (7) evaluate student outcomes (Myles & Simpson, 2001).

Self-Monitoring

Self-monitoring involves the student's recognizing and recording designated target behaviors. The idea behind this practice is that having an awareness of one's own behavior and keeping track of those occurrences serves as a useful intervention in itself (McDougall, 1998). Self-monitoring procedures are comprised of two components: self-observation and self-recording. Self-observation involves the student becoming aware of the presence or absence of the target behavior. Students record the occurrences of their targeted behavior in a self-recording

phase. This is particularly effective with on-task behaviors in the classroom, especially related to seat work. This intervention is also recommended and used to aid in the acquisition and maintenance of specific skills (Allinder, Bolling, Oats, & Gagnon, 2000).

Gable and Hendrickson (2000) suggested that self-monitoring strategies have contributed to the long term stability of appropriate social responses of students who lack social awareness skills. Moreover, self-monitoring has been seen to have a positive impact on other domains of academic and behavioral functioning related to Emotional Behavioral Disorders.

Token Economies

A plethora of teaching strategies have been shown to be effective in addressing academic and social problems that are related to EBD and other behavior problems. For example, token economies have been shown to increase positive social behaviors (Shores, Gunter, & Jack, 1993). Response cost and time out from positive reinforcement have been shown to decrease aggressive behavior (Horner & Carr, 1997). Shores, Gunter, and Jack (1993), demonstrated the influence and impact of precision requests on increasing compliance. The Good Behavior Game and self-monitoring are also well-proven strategies at promoting positive behaviors and on-task behavior (Barrish, Saunders, & Wolf, 1969). It is clear that there are practices that have demonstrated effectiveness in alleviating many challenging classroom behaviors as well as those associated with Emotional Behavioral Disorders.

Despite the notable difficulties in translating research findings into effective evidence-based practices, practitioners continue to seek useable, evidence-based interventions that can help students with EBD and other challenging behavior manage their own behavior and achieve

academic success in the general education setting. The following sections highlight the use of some recent research based methods that are effective in remediating academic and behavioral deficits.

Praise and Active Response

Two of the critical components of effective instruction are the rate at which students are given the opportunity to actively respond to academic requests and the number of praise statements students receive for appropriate academic and social behavior (Sutherland & Wehby, 2001a; Yoder & Fuerer, 2000). In a research study conducted by Sutherland &Wehby, increasing the rate at which students were given opportunities to respond resulted in improved academic performance in reading. Positive effects have also been seen in task engagement and decreased disruptive behavior (West & Sloan, 1986). Similar results have been obtained in studies of teacher praise (Sutherland, 2000). Increases in teacher praise have had positive effects on reading and math achievement. In addition, increases in teacher praise resulted in more desirable classroom behavior and increased task engagement and fewer disruptions (Gunter et al., 1993).

When looking at the "opportunity to respond" component of these approaches, it is important to situate the potential benefits of praise and frequent response in the context of the average general education classroom. Teachers in general education classrooms typically use the lecture format during large group instruction and expect their students to passively watch and listen while course content is presented. The common questioning procedure used with this model of instruction is asking individual students to volunteer by raising their hands (Armendariz & Umbreit, 1999). However, a limitation of this instructional method is that only a handful of students, usually high achievers, actively respond to teachers' questions (Greenwood, 2001).

In the past, Good (1970) found that students, in particular students who were low achievers, were not provided equal opportunities to respond and frequently passively watched and listened while their high achieving peers answered questions. The result is that low achieving students often fail to receive the practice and feedback that is necessary for achievement gains.

To increase teacher rates of opportunities to respond, researchers have theorized and conceptualized instruction as having a basic unit of instruction called a learning trial. A learning trial consists of a three-term, stimulus-response-consequent contingency sequence (Skinner, Fletcher, & Hennington, 1996). Researchers have shown that improving the quality and increasing the quantity of learning trials results in higher learning rates (Barbetta & Heward, 1993; Carnine, 1976; Miller, Hall, & Heward, 1995).

An example of a learning trial is when a teacher presents a vocabulary word (stimulus), the student recites the word aloud (response), and the teacher says, “Good answer” (consequence). Researchers have shown that increasing the number of learning trials could increase learning levels during the acquisition, fluency building, and maintenance stages of learning (Skinner, Smith, & McLean, 1994).

Choral Responding

The use of choral responding is one instructional strategy that increases both learning trial rates and learning rates during teacher-led instruction (Skinner et al., 1996). Choral responding occurs when all students are asked to respond following the presentation of an instructional stimulus. The purpose of using this strategy is to increase the number of active

student responses and, as a result, increase the number of correct responses as well as the amount of time students are engaged during instruction, while also allowing the teacher to monitor each student's understanding of each questions.

Providing students with frequent opportunities to respond is important because researchers suggest that increased student responding is linked to on-task behavior and engagement during instruction (Sainato et al., 1987; Sutherland et at., 2003). When students are engaged and actively responding to questions, teachers can focus on academic content rather than being concerned with addressing inappropriate behaviors. Increasing the focus on academic content is particularly important for teachers working with students who are at risk for behavior problems or have already been identified as EBD. The significant benefit of this kind of active engagement is that students with challenging behavior are less likely to engage in disruptive or off-task behavior. The role that keeping them actively engaged plays is paramount in complimenting any classroom behavior management program and, in many cases, may reduce or eliminate the need for more specialized behavior interventions, such as those provided by special education.

Social Competence and Behavior Problems

Along with curricular modifications and an awareness of the impact that teachers' interactions have on students with challenging behavior, research is revealing the power of social skills training as a way to mediate the relationship deficit of this disorder. It is the deficits in social competence that have led to an over-identification of students, at times, as being EBD when it may just be a case of social-behavioral difficulties rather than an "emotional disturbance" (Kauffman, 2001). The same can be said of students in general education whose biggest behavior issue may simply be a lack of experience with pro-social behavior. Results from

the National Longitudinal Transition Study (NTLS-2; 2006) showed that 48% of students identified as EBD were rated by their teachers and parents as having social skills at or below the 16th percentile. Additionally, almost half of students identified as EBD were subject to punitive disciplinary actions by schools, and about 11% were involved in the criminal justice system.

It is clear that social competence is an area of functioning that, if improved, can greatly benefit a student with behavior problems. Perhaps the best way to understand the importance of social competence and social skills is to consider them from the social validity perspective offered by Gresham et al. (2006). According to this view, social skills are specific behaviors that an individual exhibits to perform competently on a task such as active listening, reciprocal communication, and ignoring.

In short, social skills are behaviors that must be taught, learned, and performed, whereas social competence represents judgments about those behaviors within different contexts over time (McFall, 1982). Research has shown that there is significant construct validity for social competence to represent an area of intervention for students with chronic behavior problems, as well as those labeled EBD (Gresham, Cook, Crews, & Kern, 2004).

Given the number of secondary students with EBD who lack or are unable to perform important social skills, there is an urgent need for schools to proactively identify the students in most need of social and behavioral supports (Walker & Severson, 1990). Failure to intervene with students with deficits in social competence can lead to serious consequences and will likely place students on a course for negative outcomes as they mature.

Social Skills Training

To remediate deficits in social competence and prevent students from traveling down a path toward adverse outcomes, researchers have developed social skills training (SST) programs

designed to teach specific social skills that improve social development and reduce behavioral problems in students with or at risk for EBD (Gresham, Van, & Cook, 2006). Most SST programs have the following four objectives: promoting skill acquisition, enhancing skill performance, reducing or eliminating competing problem behaviors, and facilitating generalization and maintenance of social skills. Thus, the common features that all SST programs have are that they emphasize the acquisition, performance, generalization, and or maintenance of pro-social behaviors and the reduction or elimination of problem behaviors.

The philosophical backgrounds and orientations of these programs represent some of the different theoretical perspectives in the field of psychology. For example, programs based on the principles of social learning theory (Bandura, 1977) place a heavy emphasis on coaching and modeling, whereas those that take from an operant learning paradigm (Skinner, 1953) tend to include a heavy dose of positive reinforcement. Cognitive approaches, however, tend to emphasize the teaching of problem solving skills that are contextually based so students can develop skills to handle circumstances encountered in various environments.

It is important to note that there is still some debate as to how successful SST programs are with secondary students. There are, however, agreed-upon beliefs regarding the perceived efficacy of SST for secondary students with EBD (Cook, Gresham, Kern, Barreras, Thornton, & Crews, 2008). In the secondary social learning environment, peer relationships and influence become more and more important in understanding student behavior. Peer related adjustment refers to this process of developing relationships and friendships with peers in an attempt to establish social identity and participate in the social network. In the secondary grades, this process takes a central role in the development of social, emotional, and behavioral functioning.

Peer Relationships and SST

During secondary grades, the importance of peer-related social skills increases significantly as the peer network strengthens. Rodkin (2004) described this peer ecology as a proximal environmental context in which students develop and exercise their interpersonal skills. Two researchers, using a social psychologist lens, noted that proximal ecologies exert the greatest amount of influence on the development and functioning of individuals (Dishion & Dodge, 2005). This fact becomes particularly important when considering that adolescent students are at a stage in their development where they seek separation from authority figures and rely more heavily on their peers to deal with their problems, feelings, and fears. The increased importance of peers is critical in understanding their need and nature of preferred social support. There is also an increase at this developmental stage in the amount of pressure one feels to maintain the status quo and "fit in".

Strategies not Utilized

As this discussion shifts back to the topic of high ability students with behavioral challenges, it is worth noting that many of the special education strategies mentioned thus far are designed and implemented based on the individual functions of behavior as well as environmental antecedents. Nothing would prevent a classroom teacher in the general education or gifted education classroom from using a token economy, purposeful praise, social skills training, or choral responding. Most educators believe in the validity of such special practices when working with students with disabilities but likewise, most educators believe that those with the highest ability should not need "extra" services or accommodations for behavior (Davis and Bull, 1988). With the advent of quick and easy discipline policies and zero tolerance programs, it is all too easy for talented students to find themselves receiving discipline that will only take

them further from their academic potential. The most unfortunate dilemma is that many of the most difficult to manage students who have high ability are excluded from specialized services commensurate with what one would expect from special education, yet do not qualify for nomination or selection for gifted services. This lack of identification and service delivery is the product of the gifted identification and special education eligibility processes. The gap in identification and service for this population of students is what this study addresses. The following sections will present this identification dilemma in the context of students with high academic ability and challenging school behavior. Upon describing the identification dilemma, an argument for the practicality of this study is made by reviewing gifted education strategies and practices that are commonly used with this target population.

Gifted Criteria and EBD Criteria

What appears to be a fundamental obstacle in not only identifying behaviorally challenged students who may possess high ability but actually being able to utilize other options and interventions besides the traditional discipline codes lies hidden beneath what the education establishment defines as gifted. That said, another dimension that further complicates this issue are the fields of gifted education and special education themselves, which are commonly considered to be mutually exclusive of each other. This is seen most clearly through the respective identification processes of each field. The assessment process and criteria for giftedness and disability, which are regarded as separate exceptionalities, are grounded in the educational culture and values that define talents and disabilities. Authors of teacher checklists reproduce these values as "characteristics of gifted children," and children chosen for gifted

programs will, to a greater degree than might otherwise be the case, resemble the "gifted" students of Lewis Terman's landmark sample racially, ethnically, and socio-economically (Borland, 2004).

On the other side of the assessment spectrum, students who are being evaluated for special education are viewed in the context of completely different characteristics. For example, very few, if any, students referred for special education are administered tests of creativity, learning styles inventories, or interest assessments as part of the eligibility evaluation. A more appropriate strategy would be to explore the full range of student attributes which include: interests, creativity, learning styles and preferences, intellectual ability, achievement, social/emotional/behavioral development, extracurricular accomplishments, leadership capability, and motivational patterns (Reid & McGuire, 1995).

This historically narrow view of giftedness has not only had a significant impact on identifying students for gifted programs, but has prohibited many high achievers with challenging behavior the opportunity to experience enrichment, participate in extracurricular activities and special events, or be recognized for the talents or work products (Reid & McGuire, 1995). Even with the advent of using multiple criteria for identifying gifted students, which is now common in many states and school districts, the majority of students who have challenging behavior are still unable to be nominated, much less identified. Students with behavior challenges and EBD rarely score high enough on intelligence and achievement tests or are able to demonstrate high percentile motivation with classroom grades to meet requirements for most gifted programs (Watkins & Glutting, 2000). The present reality is that students who have challenging behavior do not readily fit either the traditional mold of how giftedness is perceived or the one identified through the multiple criteria approach.

Behaviorally Challenged and Gifted: A New Trend

The identification shift toward multiple criteria is a step in the right direction but it still leaves a void when it comes to capturing the full spectrum of abilities and characteristics, both positive and negative, that high ability students possess and manifest in the school setting. Some of the students with behavioral challenges, and those identified as EBD or Attention Deficit Hyperactivity Disorder, may be demonstrating their giftedness in a different manner which is considered incongruent with acceptable norms in a school setting. Davis and Bull (1988) suggested that gifted children and adolescents tend to be more self-sufficient, non-conformist, and exercise more free and independent thinking. These kinds of personality traits however, can present challenges for students in the highly structured, conformist world of the classroom (Gallagher, 1997). This brings the discussion back to understanding exactly what "one is looking for" in the gifted nomination and identification process and how that impacts overall assessment and referral procedures.

It is not surprising that very few, if any, students who exhibit challenging behavior whether they are labeled EBD, ADHD, or are simply have chronic discipline problems are referred for gifted programs as their most prominent behaviors and traits are perceived as negative. Gallagher (1997) found that students in this population were often referred to as having the "Destructive D's," that is: "dysfunctional, difficult, deviant, disordered, disturbed, disappointing, delinquent, dropout, disruptive, and disorganized" (p. 2). Some of the most notable gifted and creative people in history were probably viewed in the same manner. Two of the biggest frustrations and challenges faced by those seeking to help identify and serve high ability students with these characteristics is that not only is the literature concerning gifted and talented students with behavior problems and EBD very limited, but there have been no studies

that seek to develop a profile of the student labeled EBD whom also exhibits gifted/talented behaviors (Reid & McGuire, 1995; Morrison, 2001). The current characteristics used for identification for EBD and gifted are based on deficits and strengths, respectively. What is missing from the description of the child with behavior problems are terms like "successful," "helping," "intelligent," or "compassionate." The overall profile of attributes for those in this EBD and challenging behavior population is negative and has led to a one-dimensional view that focuses on maladaptive attributes and ignores behaviors that would expose gifted and talented potential (Morrison, 2001).

The contradictory nature of the prevailing identification philosophies for these students, with respect to the affective domain of functioning, inhibits practitioners' ability to identify high ability students with behavioral challenges for gifted programs. It is not difficult to see how these students may be perceived differently from an observational perspective; but what is more difficult to observe and quantify is how the nature of an emotional or behavioral disability affects the achievement and intelligence testing that constitutes a significant part of the gifted identification process. Strong empirical evidence exists to support the assertion that educators who assess children should not use intelligence test profiles to make diagnostic decisions or formulate diagnostic hypotheses (Hale & Saxe, 1983; McDermott & Glutting, 1997; Watkins, Kush & Glutting, 1997). Unfortunately, despite the popularity, intuitive appeal, and potential usefulness of subtest profiles such as those that measure intelligence and achievement, they have yet to demonstrate validity in predicting a child's emotional, social, or behavioral functioning or diagnosing psychopathology such as ADHD, LD, or EBD (Watkins & Glutting, 2000). Likewise, an over-reliance on standardized testing, as is typical in current gifted identification, will not be sufficient or appropriate in identifying giftedness in students who have other disabilities.

Many practitioners in general, gifted, and special education are now open to the idea that giftedness can co-exist in students with EBD and behavioral challenges. Current assessment and identification policies and procedures have begun to be more inclusive with the advent of the multiple criteria approach, but the intellectual and achievement requirements still present challenges in successfully and regularly identifying students with challenging behavior. Teacher and parent referrals remain an area of concern with respect to nomination as classroom observations, behavioral perceptions, and attitudes often maintain focus on the negative patterns of functioning. Hopefully studies like this one can lead to the development of new processes for gifted identification that encompass the full EBD profile while mediating the limitations of the current assessment and selection process so students' giftedness can be demonstrated and observed without being hidden behind their observable behaviors.

Gifted and Disabled/Implications for Identification

Since the days of Terman and his landmark study, the position that giftedness is a mutually exclusive exceptionality has been challenged. Gradually, the field of gifted education has recognized the possibility of students that have both high ability and disabilities. Particular concern has been devoted to students with learning disabilities (Baum, 1984, 1994), and has involved examinations of the characteristics and needs of students with high-ability and learning disabilities (Baum, 1994; Baum, Emerick, Herman, & Dixon, 1989; Baum, Owen, & Dixon, 1991; Neu, 1993; Reis, Neu, & McGuire, 1995; Whitmore & Maker, 1985). The more current and controversial issue addresses bright students who possess behavioral challenges such as those who are identified as ADHD or otherwise experience significant behavioral problems. The

evolving view in education suggests that children and youth who exhibit characteristics typically associated with EBD and/or ADHD, whether or not labeled as such, are routinely overlooked for consideration of gifted services (Reid & McGuire, 1995).

For the majority of years that gifted education has been practiced, this knowledge has been translated into practice. In the modern era of labeling and categorical identification, it becomes all too easy to "find what we are looking for." On that note, if a child is referred for potential learning or behavioral disorders or for possible giftedness, the diagnostic process typically focuses on whether or not the child exhibits the characteristics associated with the predominantly observed and perceived classification (Kauffman, 1994; Reid & McGuire, 1995). Assessment materials and diagnostic procedures are organized in alignment with the expected behavior and attributes, rather than as a means to provide a broad view of a child's level of ability and performance. Consequently, evaluation results which yield the absence of specified categorical characteristics generally lead to the conclusion that the child is not eligible for special services such as gifted programming (Reid & McGuire, 1995).

A primary difficulty in identifying and working with high-ability students who have behavioral problems is the scarce amount of research on this population. Furthermore, the current literature that addresses EBD and gifted respectively describes two different ends of the behavioral and intellectual spectrum. The literature on students with EBD suggests that these individuals are below average in academic ability (Hallahan & Kauffman, 1991). The literature in the field of gifted frequently refers to the students who attain IQ scores in excess of 130. Literature concerning behavioral disorders emphasizes inappropriate behaviors, contrasted with the view of gifted students as pervasively superior to those who are typical or "non-gifted." Nonetheless, conversations with teachers of the gifted highlight instances of bright students who

exhibit traits similar to emotional or behavioral disorders, while teachers of students with EBD routinely insist that the low scores attained by their students on measures of ability and achievement are not indicative of their true ability. The dilemma in gifted identification created by this contradiction in viewpoints is not new; and its roots can be traced to the origins of gifted education and the fields' original prevailing view of what constituted a gifted student. This identification gap has allowed many gifted students to remain unidentified or served. Thankfully, the advent of Twice Exceptional programming has begun to offer alternatives for students with challenging profiles. Type III investigations can play a major role in this process.

Twice Exceptional Programming

Type III investigations were originally designed to be used with gifted students. Upon reviewing the literature for interventions and programming for high ability students with behavior challenges, there seems to be a confluence of strategies where gifted education and special education collide. There are many similarities found in the Type III philosophy and in the prevalent special education practices and methods for students with learning and behavior problems. The fundamental idea and goal of these different orientations of service is to simultaneously remediate deficits in academic, cognitive, social, or behavioral functioning while addressing and bolstering strengths. The relationship building aspect of the Type III is central to the focus of working with special education students with EBD.

The primary literature support for this study can be found through a review of programming and strategies for Twice Exceptional (2E) students. Programming and interventions for 2E students must include strategies to: nurture the students' strengths and weaknesses, foster their social/emotional development, enhance their capacity to cope with mixed abilities, identify gaps and provide explicit instruction, and support the development of

compensatory strategies (Baum & Owen, 2004). The Renzulli Type III intervention utilizes all of these components and does so in a way that can be suited to address individual needs (Renzulli & Reis, 2008).

Recognition of Strengths

The first over-arching practice that is seen in the 2E literature relating to addressing the academic and behavioral needs of 2E students, is the recognition and development of strengths. Robinson's (1999) review of 2E strategies revealed that any intervention or method must address strengths as well as weaknesses. Remediation should be approached through identified strengths and should take place in a carefully structured environment. One of the primary reasons this reliance and recognition of strengths does not happen as often as it should is that most educators lack the knowledge to identify strengths and many are not able to recognize how disabilities can inhibit the growth of abilities (Bianco, 2005). Many general educators lack strategies for addressing diverse learners to the degree present in most classrooms. Type III investigations are based on self-selected projects in which an area of strength can be further developed. If students are able to spend time each day being successful and competent, they will hopefully develop the confidence and motivation to persevere in areas of weakness.

School Engagement

The participants for this study had either already begun to fail or were approaching a point where they are not motivated to participate in the academic aspect of school. Those with the most challenging behavior had also alienated themselves from teachers and peers as their behaviors deteriorated. Students with behavioral challenges frequently experience an overall disconnect with school, which underlies the prevailing attitudes and social interactions that

define a maladaptive pattern of affective functioning (Reis & McCoach, 2002). From a practical standpoint, this refers to addressing truancy issues and maintaining regular attendance.

The first step in addressing truancy is to secure parental involvement. Henderson and Mapp (2002) found a strong link between parent engagement and improvement across various measures of student achievement. Although mentioned here for assisting in building connections to school; securing parental involvement is critical in many aspects of addressing student needs and concerns and it is a cornerstone of many strategies that seek to reverse poor behavior, underachievement, and school engagement. When families are engaged in children's learning, students are more likely to get higher grades and scores on achievement tests, enroll in more challenging programs, pass more classes and earn credits, attend school regularly, and graduate at a higher rate (Henderson and Mapp, 2002).

Looking beyond factors that relate to attendance and participation involves delving into the constructs of engagement, attachment, and bonding. Researchers have argued that by establishing a supportive and inclusive environment, schools are able to foster and support student perceptions of belonging and thereby increase student engagement and achievement (Goodenow, 1993; Osterman, 2000; Voelkl, 1997).

It should be noted that investigations pertaining to a personal perception of belonging and the subsequent behavioral response is not new within the fields of social, developmental, personality, and educational psychology (Baumeister & Leary, 1995; Osterman, 2000). Maslow (1968) argued that only food and shelter take precedence over the need for love and belonging, whereas attachment theories have historically maintained that taking part in a mutually beneficial relationship plays a vital role in personal growth and development (Bowlby, 1969, 1973). Furthermore, theorists and researchers such as Horney (1945), Fromm(1956), and Hagborg

(1998) have all articulated the significance of perceiving oneself to be a valued member of a wider group. However, although the need to belong is likely to be pervasive throughout a person's life, research has suggested that during the period of adolescence the need to connect with others through mutually supportive relationships is at its peak (Midgley et al., 1989). Therefore, even though research regarding belonging has an established place in the wider field of psychology, it seems especially relevant to the study of adolescent attitudes and behavior within the context of school.

The significance of school engagement and connectedness was investigated by Libbey (2004) who reported measurable salience for nine unique elements that relate to school connectedness: 1) academic achievement, 2) belonging, 3) discipline/fairness, 4) extracurricular activities, 5) likes school, 6) student voice, 7) peer relations, 8) safety, and 9) teacher support. The process of implementing a Type III investigation offers the opportunity to address each of these areas.

Mentoring.

Another area of addressing needs for this population involves mentoring. Mentoring programs have had a positive effect on many risk factors that adversely affect adolescents such as peer pressure, substance abuse, sexuality and teenage parenting, child abuse and family violence, depression, and suicide (Hébert & Olenchak, 2000; Rhodes, Grossman & Resch, 2000; Smink & Schargel, 2004; Hébert, 2011). Many of these factors play a role in the underachievement and challenging behavior of students with and without disabilities (Hallahan & Kauffman, 1991). In the absence of a sanctioned program, mentoring relationships can be developed between students and adults in any number of ways. Research shows that a positive

relationship with a caring adult with similar interests and experiences can have a significant impact on students who struggle with emotional, behavioral, and academic difficulties (Hebert & Olenchak, 2000; Hébert, 2011).

Service Learning

Another method discussed in the literature for working with this population is Service-Learning. Shumer (1990) and Duckenfield (1992) reported that when done well, implementing principles of good practice service-learning enables students to engage positively in their surroundings to effect change. Service learning has the potential to reduce alienation, promote school engagement, and increase motivation and classroom performance (Billig, 2000; Terry, 2003; Terry & Bohnenberger, 2003). Participants of service learning develop relationships with program facilitators and participants, gain autonomy and competence, and feel empowered by making a difference in the lives of others. Furthermore, most service learning takes place during hours when they might engage in risky behaviors (Kirby, 2001). The end product of the Type III intervention was all based on solving an applied problem or real world need. It is not possible to escape the service aspect of this type of experience since the participants were charged from the beginning to think about how they can use their talents to contribute to the common good of the local and school community.

Creative Productivity with Type III Enrichment

The Enrichment Triad Model, as defined by Renzulli (1977), is an instructional pattern for delivering enrichment learning and teaching. It consists of three types of enrichment activities: general exploratory activities (Type I), which are investigations for students to pursue topics in-depth; group training activities (Type II), which consist of methods, materials, and

instructional techniques to develop students' higher level thinking processes; and students' self-selected, real-world investigations of selected topics (Type III).

Type III investigations have come to be one of the most common programming options for gifted learners (Renzulli, 1977, 1985, 1997, 2008; Baum, Renzulli, & Hébert, 1995). Through participation in Type III investigations, high ability students have the opportunity to explore an area of interest and strength under the supervision and collaboration of a mentor teacher. Together, they identify and solve a real world problem by developing a product or service using methods and practices that are intended to mirror ones that a professional in a related field would use. When implemented with fidelity, these investigations have been shown to have a positive impact on student motivation and achievement (Hébert & Olenchak, 2000; Reis & McCoach, 2000, Renzulli & Reis, 2008; Hébert, 2011). Furthermore, Type III's have been effective in reversing underachievement in gifted students (Baum et al., 1994; Baum, Renzulli & Hébert, 1995; Renzulli, Baum, Hebert, & McCluskey, 1999; Hébert, 2011).

Although Type III investigations represent a common approach in gifted education, there is scant evidence of their use and effectiveness outside the walls of gifted classrooms (Reid & McGuire, 1995; Reis & McCoach, 2002). In a review of the literature that pertains to addressing the needs of high ability students with emotional and behavioral challenges, an emerging trend highlights the growing belief that students such as these require programs and interventions that borrow insight and strategies from gifted education and special education (Reis & Neu, 1994; Reid & McGuire, 1995; Horner & Carr, 1997; Siegle & McCoach, 2005). Baum, Renzulli, and Hébert (1994) combined many of these elements described above in an intervention for reversing underachievement in high ability students. They found through the use of mentors, self-selected topics in preferred learning styles, focusing on strengths, and working to address real world

problems, that gifted students who were previously disengaged from school became more productive and experienced better school relationships. These students were not recognized as having behavioral challenges per se but they all exhibited traits and characteristics that one might expect to see in students with emotional problems.

One student from this study whose story is indicative of the impact that a Type III investigation can have was Jamison. Jamison was a 4th grade student who believed he was related to Abraham Lincoln. He had been told for years that the 16th President of the United States was part of his family's lineage, but his relatives had never provided him with the information he needed to trace his family history. He wrote to his grandparents numerous times but received no response. Finally, he called them and learned that an older cousin had once traced the history and discovered information which supported Jamison's belief about his family's heritage. During the course of an intervention as typified in the story of Jamison, teachers can learn more about the home, school, and motivation patterns of individual students while working with the students on their Type III investigations. Although specific details were often specific to individual students, qualitative analysis of information obtained from logs, student interviews, and products across cases led to the emergence of specific patterns of underachievement (Baum, Renzulli, & Hebert, 1994).

Talent Development

For challenging students with high ability, it is important to utilize what has been proven effective for gifted learners and embed those methods with strategies that address students with challenging behavior. A good place to start is with Renzulli's of talent development (Renzulli, 1977). Renzulli's well-established model is a triadic model of enrichment that endorses student activities at three levels. Type I activities are enrichment activities that expose students to topics

not normally covered by the standard curriculum that might be carried out with field trips, guest lectures, films, simulations etc. These activities are designed to stimulate interests.

Type II activities include problem-solving strategies, critical thinking skills, and creativity strategies that provide students the process skills needed for in-depth study of different topics or interests. Type III enrichment involves individual or small-group investigations or products that evolve from an authentic problem, result in an authentic solution, and are presented to a real-world audience. The process of investigation that students apply is grounded in the methodology that professionals in the appropriate discipline actually use.

The Renzulli model incorporates many aspects of interventions and programming that are common in gifted education and are in line with many of the practices used for 2E students. The self-selected nature and area of interest, combined with an applied product, through a supportive mentoring relationship and academic rigor are all components used in other areas of education in a variety of forms. Although Renzulli's model was designed specifically for addressing the needs of gifted and talented students, when combined with knowledge about effective instruction for students with EBD and 2E needs, it is possible to redefine the learning environment in a way that can address strengths and weaknesses in every learner. Research suggests that this study could be very successful if fidelity to the Type III framework is maintained.

Conclusion

The most challenging students who have the highest ability are not identified as such and therefore do not get the special attention and resources they deserve to reach their highest potential. The identification processes of gifted and special education are not designed to capture the unique attributes of this population. For that reason, these students of challenge and promise

are subjected to school discipline policies that foster alienation and disengagement from school. For those who end up in special education under the EBD eligibility, they are more routinely suspended and excluded from the learning environment which only serves to exacerbate the social, emotional, and academic problems that are usually underlying functions and antecedents to their problem behavior.

Using Type III investigations and working with a designated mentor teacher will stimulate a renewed interest and desire to learn while reengaging these students in the school environment. Instead of becoming another drop out statistic, these students have the opportunity to bring out the best they have to offer and hopefully find themselves again. This study combined the most effective strategies from special education and gifted education and attempted to redefine what we refer to as gifted and behavior disordered.

CHAPTER 3

METHODOLOGY

Theoretical Framework

To be able to understand a research methodology, it is important to follow the epistemological and theoretical perspectives whose foundations give meaning to the method's use. Crotty (1998) described the reality that our beliefs about knowledge and meaning influence our philosophy and understanding of the world, which in turn influences our general thinking and assumptions about research, which in turn influences our thoughts and actions during research. Through this process of defining and assigning meaning, we allow our epistemologies to inform our theoretical perspectives, which guide our methodologies, which ultimately lead us to the methods we use. What is important to note for the purposes of situating a framework within the context of a study, is that the research method chosen cannot be viewed as separate from the epistemological and theoretical bases where it's origins lay.

This study is grounded in Deweyan pragmatism. Pragmatism is the belief that a proposition is true if it can be implemented successfully. In this vein, education consists of learning to solve problems; or learning to inquire and conduct research (Gallagher, 1992). For Dewey (1944), the content of education lacks value in itself; it receives its value only when it is ordered to the solution of a problematic situation. The focus of this study involves examining the problem of underachievement for a specific group of learners. This type of intervention has yet to be implemented with this particular target population. The primary focus of the Type III investigation is based on a problem solving model that is pragmatic in nature. Students will seek

to identify a real world problem and develop a solution that has a practical application. I believe the key connection between Deweyan pragmatism and the work of a Type III study is that an applied product that solves a problem has value in itself, just as Dewey argued that education has no value if it does not produce a useful outcome.

Deweyan Pragmatism is aligned with problem solving based learning in general. This connection is evident in developmental foundations of experiential learning, which is a primary pedagogical framework for Type III investigations. The Deweyan pragmatic framework supports the ultimate goal of the research project, which was to use the Type III intervention to examine the problem of underachievement and problem behavior. Pragmatism proposes to identify an area of need or a problem that can be solved by developing the solution or applied product that solves the problem or fulfills a need. I believe John Dewey would be a supporter of students engaging in Type III investigations, although he would probably view Type III experiences as sound instruction that should be the norm in schools.

Case Study as a Research Design

This multiple case study investigation used qualitative methods that included interviews, observations, and archival documents. In this study, I attempted to determine if participation in a Type III intervention had a positive impact on the behavior, assignment completion rate, and overall academic achievement of the participants. Additionally, I hoped to gain a deeper understanding of the phenomenon of school engagement for high ability students who exhibit challenging behavior. To address the questions raised by this study, a qualitative multi-case study approach was used. This approach has been reported to be powerful in developing and testing theory when methods based on sampling logic are difficult or impossible to use. Another

reason for using this approach is its' ability to capture the holistic nature of the complex dynamics of a system that causes the phenomenon within a context (Lincoln & Guba, 1985; Moon, 1991). As the researcher, I played a vital role in both implementing the study and collecting relevant data. While arranging the student-mentor partnerships, I observed and collected data that enabled me to understand the students, and identify relevant issues related to their former behavior and academic underachievement. The mentors and I, as researcher, were ingrained in this process as we interacted and participated with the students in the study. Interviews, observation, and archival documents were used to better understand the learning experiences of the participants (Patton, 2002). The results of this study have allowed me to provide answers to the research questions and help inform the process of future development of specific strategies that schools and teachers can use to help students succeed.

Participant Recruitment and Selection

Five students were selected to participate in this study using purposeful sampling. Purposeful sampling, "focuses on selecting information-rich cases whose study will illuminate the questions under study" (Patton, 1990 p. 230). The specific method of purposeful sampling used in this study is commonly referred to as "criterion sampling" (Goetz & LeCompte, 1984). I sought high ability students who had a history of challenging behavior. Evidence of high academic ability was documented by prospective participants having exceeded expectations (score of 850 or higher) on past Criterion Reference Competency Test (CRCT) or End of Course Tests (EOCT), and/or scoring in the 90% percentile or higher on the Iowa Test of Basic Skills (ITBS). Evidence of behavioral challenges was documented by three or more office referrals in the past year for disruptive, disrespectful, or defiant behavior.

Phase One of Participant Selection

The first step in the selection process was to generate a pool of 15-20 possible participants through a review of student records. Student information indicating evidence of high ability was accessed through the Infinite Campus student information system. The assessment information reviewed included: Criterion Reference Competency Test (CRCT), Iowa Test of Basic Skills (ITBS), Georgia Writing Test (GWT), End of Course Test (EOCT), and Georgia High School Graduation Test (GHSGT). When reviewing CRCT, EOCT, and GHSGT scores, I looked for scores that met or exceeded standards as indicators of high ability. When reviewing ITBS or any standardized achievement test, I looked for scores in the 90% percentile or higher. By reviewing previous grades and past assessment scores, I intended to identify academic patterns of high ability.

Phase Two of Participant Selection

The behavioral criteria for participant selection was met by a student having a documented pattern of behavioral infractions and/or office referrals, or a placement at the school district's alternative center in the last school year. The first step used to make this determination was review of student records to identify students with more than three office referrals in the last school year. To be considered behaviorally challenged for the purpose of this study, the nature of the discipline referrals were related to behaviors associated with Gallagher's (1994) destructive D's which are: difficult, deviant, disturbed, delinquent, dropout, and disruptive.

Phase Three of Participant Selection

Table 1 - Research Participants and Their Demographic Profiles

Name	Gender	Race	Current Age	Grade
Adam	M	European American	16	11
Miranda	F	European American	14	9
Deon	M	African American	17	11
*Todd	M	European American	17	11
Brian	M	European American	15	10

*Todd has a diagnosis of Asperger's Syndrome

Table 2 - High Ability Selection Criteria

Participant	**ITBS 6-8th grade (percentile)**	**CRCT 6-8th grade (Exceeds=850 or higher)**	**EOCT Exceeds (based on standardized scale score)**	**Previously Identified as Gifted**
Deon	Math 90% S.S 90% Science 90%	None	None	No
Adam	Math 99% Science 99%	Exceeded on all subjects	Exceeded on all subjects	Yes
Miranda	Reading 99% Math 95% S.S 90%	English Reading	None	Yes
Brian	Math 99% Science 90% Reading 95%	Exceeded on all subjects	Exceeded on all subjects	Yes
Tony	Math 99% Science 95% Reading 95% S.S 90%	Math	9th grade Literature American Literature Math	No

Table 3- Behaviorally Challenged Criteria

Participant	Behavior Referrals in last School year
Adam	1. Disrespect to teacher 2. Bullying 3. Fighting 4. Disrespect to bus driver 5.Fighting
Miranda	1. Fighting 2. Throwing juice on student 3. Profanity 4. Disrespect to teacher 5. Disturbing school environment 6. Fighting 7. Profanity 8. Bullying 9. Disrespect to teacher 10. Profanity
Tony	1. Disrespect (failed to respond to teacher) 2. Failure to follow directions (refused to work) 3. Disrespect (failed to respond to teacher 4. Failure to follow directions(refused to enter class room)
Brian	1. Disrespect to teacher 2. Disturbing school environment 3. Failure to follow directions 4. Disrespect to teacher 5. Obscene to staff 6. Battery 7. Disrespect to teacher 8. Profanity 9.Obsene to staff
Deon	1.Disrespect to teacher 2. Disrespect to teacher 3. Profanity 4.Disrespect to teacher 5. Disrespect 6.Profanity 7. Failure to follow directions 8. Disrespect to staff

Data Collection

Phase I

In this multiple case study approach, qualitative data was collected from multiple sources. I attempted to gain an accurate view of individual cases by converging on the problem of underachievement and problem behavior from a variety of perspectives (Moon, 1991). Prior to the initiation of the study, participants were rated using the Behavioral Assessment System for Children 2nd edition (BASC-2) (Reynolds & Kamphaus, 2004). The parent, teacher, and self-report ratings were obtained for each participant. I scored each of these using the BASC-2 Assist scoring software.

Phase II

Current grades and assignment completion were accessed using the student information system. Behavior and discipline reports were collected and reviewed to determine which behavioral referrals related to the specific types of behavior targeted for this study. As the study progressed, I recorded my own observations and reflections as well as those from participating teachers.

Phase III

Other sources of data included: individual semi-structured interviews with the participants and teachers, student work samples, attendance reports, behavior checklists, interest surveys, and student products. These sources of data were important in helping me determine if any improvements were made in classroom performance and achievement.

Phase IV

Post test ratings were conducted with the BASC-2 to assess any changes in overall affective functioning.

Measures

The Behavior Assessment System for Children-2 (BASC-2)

The BASC-2 was the primary measure of affective functioning used in this study. The BASC-2 (Reynolds & Kamphaus, 2004) is a recent revision of the Behavior Assessment System for Children (Reynolds & Kamphaus, 1992). The BASC-2 was designed to, "facilitate the differential diagnosis and educational classification of a variety of emotional and behavioral disorders of children and to aid in the design of treatment plans" (Reynolds & Kamphaus, 2004, p. 1). The BASC-2 is a multi-method system for ages 2-21; its components may be used individually or in any combination. It contains a Self-report of Personality (SRP); Parent Rating Scale (PRS); Teacher Rating Scale (TRS); Structured Developmental History (SDH); and Student Observation System (SOS).

The BASC-2-PRS is completed by a child or adolescent's parent or other significant adult figure. The other forms (SRP and TRS) are filled out by the child and their teacher, respectively. The parent or significant adult figure is asked to read phrases that describe how children may act and then rate their child's behavior in the last several months relative to the phrase. The questions are based on a four-point Likert scale. The four-choice response format uses letters instead of the standard numbers. Parents are asked to circle N for Never, S for Sometimes, O for Often, and A for Almost Always in response to the behaviors they have observed. The BASC-2-PRS Adolescent version has 150 items and takes approximately 10-20 minutes to complete. The TRS is similar to the PRS, although it usually requires 10-15 minutes to complete. The SRP form asks children and adolescents to describe their emotional-responses

and self-perceptions. The question format consists of true/false questions and the four-point Likert scale as described for the PRS and TRS. The SRP is slightly longer and takes approximately 30 minutes to complete.

Interpreting the BASC-2

Along with the interviews, field notes, and anecdotal updates from the mentor teachers, the Behavioral Assessment System for Children 2nd Edition was used in a pre and posttest format. At the onset of the study, BASC-2 rating scales were completed by the participants, the participants' parents, and selected former teachers who had worked with the participants in previous semesters. These forms were scored using the BASC-2 Assist scoring software. I obtained the summary reports for each which provides a T-Score Profile for each domain of social and emotional functioning. The domains measured on the BASC-2 are: 1) Hyperactivity, 2) Aggression, 3) Conduct Problems, 4) Externalizing Problems, 5) Anxiety, 6) Depression, 7) Somatization, 8) Internalizing Problems, 9) Attention Problems, 10) Learning Problems, 11) School Problems, 12) Atypicality, 13) Withdrawal, 14) Behavior Symptoms Index, 15) Adaptability, 16) Social Skills, 17) Leadership, 18) Study Skills, 19) Functional Communication, and 20) Adaptive skills.

When interpreting domains (1-14), which are descriptive of characteristics and traits that interfere with adaptive functioning, T-scores above 70 are in the clinically significant range and indicate that this area of functioning is likely having an impact on academic, social and behavioral functioning. Clinically significant scores represent areas where intervention and services are needed. T-scores that fall between 60 and 70 in these 14 domains indicate at-risk levels of functioning, which would require further observation and possible screening. The adaptive scales (15-20) represent positive attributes that are indicative of pro-social functioning

and academic progress. For these domains, a T-score below 30 would indicate clinical significance while T-scores between 30 and 40 would indicate levels of at-risk concern. The score report also provides a scale summary, which gives a brief narrative description and analysis of the student's scores in each domain. An example from one of the study's participants reads, "Brian's (pseudonym) score on the Conduct Problems is 73 and has a percentile rank of 96. This T score falls in the Clinically Significant classification range, and usually warrants follow-up" (Report generated by BASC-2 Assist Plus Version 1.3).

After the initial pre-intervention ratings were obtained, I recorded and made note of all scores for each participant that were clinically significant or at-risk. This became my BASC-2 baseline. At the conclusion of the study, rating scales were once again obtained from the research participants and their parents. Additionally, rating scales were completed by each of the mentor teachers who rated the particular participant they worked with. Ratings were also obtained from the current classroom teachers who taught the respective participants during the course of the study.

Psychometric Properties.

The following section describes the psychometric properties that were considered in making the determination to use the BASC-2 as the outcome measure for this study.

Reliability. Internal consistency estimates for the BASC-2-PRS using a test/re-test interval of 9-70 days produced mean correlations from 0.78-0.92 for the composite scales across all three age groups. Reliability of the BASC-2-PRS composite scales is estimated to be very high, ranging from the low to middle 0.90s using coefficient alpha. These reliability estimates are quite consistent across gender, between clinical and non-clinical groups, and at different age levels (Reynolds & Kamphaus, 2004). These high estimates of internal consistency indicate that

the BASC-2 is a reliable measure. Median inter-rater reliabilities are slightly lower at 0.74, 0.69, and 0.77 for preschool, child, and adolescent levels respectively, although this is not unexpected according to general research on inter-rater correlations (De Los Reyes & Kazdin, 2004).

Validity. Content validity of the BASC is supported by the numerous competencies and problems it assesses that are of clinical concern to parents, mental health workers, teachers, and children. Construct validity of the BASC-PRS is supported by the correlations of its scales with analogous scales on Child Behavior Checklist (Achenbach, 1991) and with externalizing scales of the Conners' Parent Rating Scales (Conners, 1989). The Minnesota Multiphasic Personality Inventory (Hathaway & McKinley, 1943 [renewed 1970]), Achenbach's Youth Self-Report (Achenbach, 1985), and the Behavior Rating Profile (Brown & Hammill, 1983) showed a number of high correlations with the BASC-SRP scales. Criterion-related validity is indicated by the authors (Reynolds & Kamphaus, 2004), although an average classification accuracy is not presented. Validity is also supported by scale inter-correlations and factor analysis for the grouping of scales into composites.

The original BASC appears valid for change. It has been used successfully as an outcome measure in hundreds of studies (Evans, Axelrod, & Langberg, 2004; Lehner-Dua, 2002; Packman, 2002). Effect sizes in these studies are within the large range, with some subscale effect sizes falling within the moderate range, and a few subscales falling in the small range. Although the BASC-2 is new, it is expected that it, too, is valid for change as its psychometric properties are improved from those of the original BASC.

Cut-off scores. General norms for the BASC are based on a large national sample representative of the general population with regard to age, gender, ethnicity, and clinical or special education classification (Reynolds & Kamphaus, 1992, 2004). Normative scores are provided for each

scale of the BASC including a T-score and a percentile. Notably, the BASC makes use of Linear T-scores, so it is not appropriate to interpret these T-scores in terms of the normal distribution. The T-scores must be interpreted in light of their corresponding percentiles because the relationship with linear T-scores and percentiles varies with the shape of the score distribution (Reynolds & Kamphaus, 2004). The BASC does not have a raw cut-off score in order to clearly ascertain a client's status by simply summing item scores, yet T-scores of 60-69 are classified as at-risk and scores of 70 and above are classified as clinically significant.

Use as an Outcome Measure

The results of repeated administrations of the BASC can be used to track functioning in relation to scale-score norms for the child or adolescent's age, gender, and type of informant (if using other forms). The data provided by the BASC allows clinicians to see actual change in scale scores and whether scores have moved from the clinical range to normal range. Although the original BASC had some limitations for use in outcome assessment because it did not contain enough items to assess changes in the patterns of illicit substance abuse or other severe behavior problems (Kamphaus, Reynolds, Hatcher, & Kim, 2004), it appears that the authors addressed those limitations in the BASC-2. However, outcome studies with this newer version are as yet unavailable.

Sensitivity to Change

There are no published data on sensitivity to change for the BASC or BASC-2. There have been several explorations of the BASC's sensitivity in assigning diagnoses (Doyle, Ostrander, Skare, Crosby, & August, 1997; Ostrander, Weinfurt, Yarnold, & August, 1998), but this type of sensitivity cannot be considered synonymous with the measure's sensitivity in assessing changes due to a psychotherapeutic intervention.

Interest Inventory.

The Secondary Interest-A-Lyzer (Hébert, Sorensen, & Renzulli, 1997) was administered to the participants at the beginning of the study. This informal interest inventory helps identify specific areas of interest that were informative in developing the direction of each participant's Type III investigation. The questions and prompts on the inventory identify school based, occupational, and leisure interests. One example of a school based question reads, "You are fed up with the course offerings at your high school. Your principal has asked you to design the perfect course for people with your same interests. What would the course be called? What would be taught?" An example of an inventory item that addresses social issues reads, "In connection with a Law Day celebration, a conservative and a liberal attorney in your community have been invited to your high school to debate a topic. What are your three preferred choices for possible debate topics? Why are they important issues?" A more personal example from the Interest-A-Lyzer is, "Teenagers in your community have been asked to prepare individual time capsules for future generations. You are allowed to include 10 personal possessions that are representative of you. What would you include in your capsule?"

Other questions identified specific career interests, places participants may want to visit, famous people they may want to meet. The information obtained from these questionnaires was very valuable in painting a picture of what each participant was like. After each participant completed the inventory, I went over the responses with them and discussed and clarified responses that potentially informed areas of interest. This process was also very beneficial in building rapport with each participant. I was able to begin to build trust with the participants as personal issues and aspirations were presented. This stage of the study also helped inform the process of connecting them with an appropriate mentor.

Interviews.

At the onset of the study, I interviewed the participants and classroom teachers. The semi-structured interviews (Appendix E) with the participants attempted to encourage discussion related to their attitudes toward school, self-concept, post-secondary goals, and other factors that may have been impacting their motivation and social functioning. Some of the questions I asked in the interviews included: Tell me about your past experience with school. What have you liked? Disliked? Describe your strengths? What are you good at? Describe your weaknesses? Do you consider yourself a good student? Why or why not? How would you describe yourself to someone who didn't know you? These interviews were critical in building trust and rapport with the participants as well as developing an insight into their identities as students.

When I interviewed the participants' teachers, I focused the questions on describing the students' performance in class, as well as attitude, behavior, and relationships with others. I asked questions such as: What kind of student is he/she? How do they relate to you and other students? How do they handle frustration and conflict?

With the information obtained from these interviews, I was able to develop a base line qualitative description of the participants' functioning before the Type III began.

Observations

I conducted multiple observations of and had frequent meetings with participants throughout the study. I either met with or observed participants and mentors at least once a week for about 30 minutes per meeting or observation. Two of the participants were actively engaged in providing services as part of their project, one being animal therapy and the other tutoring. I was able to observe them weekly for up to 30 minutes. The other three participants were developing products with their mentors and I met with each team once a week for 30 minutes. I

made use of field notes on a daily basis as I interacted with and observed the participants. Along with the field notes, I recorded my own reflections as the projects developed. The mentor teachers conveyed updates to me via email which I saved and transcribed in the form of field notes on the daily and weekly interactions and developments as the process unfolded.

Archival Documents

There were many artifacts to review and analyze as a result of this study. Student work samples, interest inventories, and participant journals and reflections were collected from each participant during the course of the study. Weekly behavior reports and grade assessments were obtained from the participants' content teachers and the student information database. All of this information played a role in documenting and describing the participants' academic and behavioral progress through this experience.

Daily Routine

I interacted with and observed participants and their respective mentor teachers two to three times a week throughout the duration of the study. I also served as a general facilitator to the participants when their mentors were unavailable and when arrangements and communications with classroom teachers were needed. Field notes were kept on the daily interactions and developments of the participants. I also kept my own journal throughout the experience and documented my observations and thoughts as a participant observer, researcher, and special education instructional specialist in the school where the study took place.

Data Analysis

The data in this qualitative, multi-case study design study was analyzed using content analysis (Berg, 2009). Qualitative data, including transcripts from interviews, journal entries, observation notes, student products, and teacher reports were analyzed. Content analysis can be

described as, “a careful, detailed, systematic, examination and interpretation of a particular body of material in order to identify patterns, themes, biases, and meanings” (Berg, 2009, p. 338). Open and focused coding strategies were used to identify themes from the data (Charmaz, 2006). Next, axial coding was used to hone in on one category and produce a typological scheme containing specific categories related to the different causes and factors of behavior problems and underachievement and the effects of the Type III intervention. In addition to themes previously identified in the literature, I was also searching for the existence of new categories and themes that may arise.

When analyzing the data, I examined cross-case and within-case evidence together. Through within-case analysis, I was able to frame the analysis by looking at each individual case as a separate entity, analyze the data of the individual case, and make comparisons within a specific case (Gerring, 2007). When I examined the data from cross-case analysis, I looked at data from a macro perspective in relation to the additional cases. After the individual analyses, I examined the cross-case and within-case data to develop a full analysis (Patton, 2002).

Grounded Theory Analysis

For the data analysis procedures I chose to utilize grounded theory coding methods, specifically a blend of those proposed by Strauss and Corbin (1990) and Charmaz (2006). The primary reason I decided to use grounded theory as a coding method relates to the case study research design of this study. My main concern was being able to describe the experience of the Type III investigation from the participants’ perspectives. I felt that grounded theory’s two-sided focus on, “understanding people’s experiences in as rigorous and detailed a manner as possible” and, “developing increasingly richer concepts and models of how the phenomenon being studied actually works” was an ideal way for me to be able to attempt to answer the research questions

posed by this study (Ryan & Bernard, 2000, p.782). I also found several of the typical grounded theory coding practices to be very helpful in my attempts at coding my interview data. The practices I found to be most beneficial at the onset included 1) the "constant comparative method" (Glaser & Strauss, 1967), whereby I continually compared and contrasted developing themes and concepts as they emerged from the analysis, 2) the practice of "in vivo coding" (Strauss & Corbin, 1990), where I used the actual words from the interviews as initial codes, 3) the writing of memos to organize and develop emerging codes and themes (Strauss & Corbin), and 4) the use of gerunds when appropriate for coding labels as well (Charmaz, 2006).

Early Stages and Open Coding

My data analysis procedures were as follows: I prepared my data for analysis by collecting and typing all field note observations as well as other notes I made based on interactions, documents, student information data, teacher input, and emails from mentor teachers. All interviews were transcribed verbatim and sent back to the participant for member checking purposes and the verification of their accuracy (Lincoln & Guba, 1985). Next, after typing all collected data to an electronic word-processing file format, I assigned each file (such as a specific interview or piece of data) a reference code. I then created a spreadsheet for coding purposes with the following columns: Quote or textual excerpt, initial open code, focused code, axial code category (theme), and which research question the theme related to.

Once the spreadsheet was prepared, I devoted a significant amount of time going through every document, transcript, and field notes that I had recorded. Each instance of an interesting or meaningful quote or observation was transferred to the coding spreadsheet. An initial open code was assigned to each selected excerpt. Initial codes, whenever possible, were done through the in

vivo method recommended by Strauss and Corbin (1990) and/or with the use of gerunds to keep the codes "open and active" as preferred by Charmaz (2006).

Focused Coding

Once initial coding had been completed, I began to develop focused codes. This was done by following the method proposed by Charmaz (2006), who advised that this layer of coding be more, directed, selective, and conceptual than word-by-word, line-by-line, and incident-by-incident coding. The first step in this process was to identify similar codes and condense them into a refined code. As other codes became further refined, they were continually checked against the ones that had already been created using the constant comparative method.

Reflexive Practices

Throughout the focused coding process, and increasingly as I proceeded to the later stages of analysis, I occasionally reflected on my emerging codes and understandings through a variety of reflexive techniques. The first of these was the constant comparative method, as described above. The second of these was writing memos. Strauss and Corbin (1990) detailed that three types of memos may be helpful in the coding process. "Code notes" describe the codes you are forming, "theory notes" describe the relationships you see forming between the codes, and "operational notes" that pertain to your general procedures. The third major reflexive technique was the examination of "negative cases", which are quotes, observations, or other such data that seems to contradict the emerging understandings, codes, or themes. The consideration and inclusion of negative cases can ultimately strengthen a researcher's understanding and conclusions (Ryan & Bernard, 2000).

Axial Coding

The next step in the coding process was axial coding, which begins to connect focused codes into concepts or themes. When I finished my focused coding, I felt confident that each of my focused codes represented a distinct concept or idea independent of the others. This is how I generated and identified the major themes that could provide answers to my research questions. The process of creating axial categories from refined codes was done through a gradual process of reflection and comparison.

An example of what this process looked like begins with a quote from Adam in his pre investigation interview. In response to being asked about his past school experiences he said, "I don't try anymore to be a good student." I assigned this quote the open code "I am not currently a good student." Adam was aware of his past success and current ability but had received more negative feedback than positive over recent years. The focused code became, "Experienced more failure than success in school." The Axial code assigned to this quote and others presented an answer to one of the research questions was, "More opportunities for success needed at school."

Establishing Credibility

Lincoln and Guba (1985) refer to credibility as how believable a research study is and how well the findings are received by its audience. Credibility can strengthen transferability, which relates to the capacity to replicate a study's findings in another setting. Throughout the process of designing the study, collecting and analyzing data, and presenting the findings, I worked to meet the six agreed upon indicators of quality by seeking transparency, thick description, reflective practice, consistent procedures, and sensitivity to my participants and school community.

I have attempted to paint the picture of this experience for the participants by soliciting information from them, their parents, and the teachers that know them best. I was diligent in identifying interest and matching participant interests and personalities with the selected mentors. At the conclusion of the study, I interviewed the mentors as well. I tried to focus my conclusions and findings on what could be gleaned from the semester during which the study took place without including data or information that did not pertain to what was going on within the study.

Even though the study was confined to one high school, the characteristics of the participants and mentors can certainly be found in countless other schools and educational settings. I argue that the effectiveness of this kind of study could be replicated with other high ability students with similar emotional and behavioral challenges and would yield similar positive outcomes. The best way to determine if these findings are accurate would be for others to replicate this process in another setting and see what unfolds.

CHAPTER 4

DESCRIPTION OF THE RESEARCH SETTING AND PARTICIPANTS

This study was conducted at Maple Wood public high school (pseudonym) in the southeastern United States. The school is located between a major suburban area and several rural communities. The school has a population of approximately 1100 students. Seventy percent of the students receive free or reduced lunch. Based on the percentage of students receiving a free or reduced lunch, the school is designated as a targeted assistance school and is eligible for additional federal and state funds to meet the needs of students from low income backgrounds. Despite earning this designation, the attendance zone for this school also encompasses some of the wealthiest neighborhoods in the school district. Gifted, Advanced Placement, and general curriculum tracks are offered in a Learning Focused instructional framework. Learning Focused instruction is a standards-based format that follows an instructional pedagogy in which concepts and themes are taught using essential questions, content specific vocabulary, and a lesson plan that features a warm-up, activating strategy, mini-lesson, work session, and summary and reflection. All courses offered are aligned to the state-mandated Curriculum Performance Standards.

To paint a picture of the participants and their cooperating mentor teachers, I have included the following descriptions. I describe how the participants qualified for and became involved in the study as well as how this process informed the selection of mentor teachers. I have tried to lend some insight into both the high potential and behavioral functioning of each

student and how these traits related to mentor selection and the development of their Type III investigations. All identifiable names of the school, community, participants, and mentor teachers have been replaced by pseudonyms.

Adam: "I've never been the most liked kid in school."

Adam was a Caucasian, 16 year-old, 11th grader whose small frame was carried by a confident strut, a street tough personality, and a firm handshake. Adam had wavy black hair and a sharp handsomely chiseled face. Adam wore the currently trendy straight-legged jeans and skateboard sneakers. On most occasions, he wore a T-Shirt with an interesting or funny comment or drawing on it. He liked to stand out when it comes to fashion.

When speaking to Adam, it became clear that his persona hid a sensitive and well-mannered young man who possessed an intellect and wisdom beyond his years. I was immediately impressed with his ability to reflect and be objective about himself. He had been served in the gifted program previously in middle school and had long since been aware of the discrepancy between his academic ability and his poor behavior at school. "I do have a tendency to get into trouble a lot more than most other kids," he reported at the onset of the study. He also had positive things to say about himself: "I am outgoing, I definitely persevere. And, I have a great personality." Adam displayed a quick wit and he spoke with an equally quick speech pattern that was indicative of his high level of cognitive functioning and awareness.

I had known Adam for over a year before he was recruited for the study. Upon entering high school, he had quickly developed a reputation with teachers and administrators as being a behavioral challenge. I was called in to assist with some of these behavioral issues. He was accused of bullying a special education student on the school bus and had several reports of

bullying and teasing other students at school, which prompted my involvement. Even though our initial meeting was under unfavorable circumstances, I recognized that he would be a good candidate to benefit from a Type III investigation.

Adam was previously identified and served in the gifted program in middle school. His composite ITBS scores (average of all subtests) from 6-8th grade were all above the 90th percentile, with several of his sub scales for math and science scoring at the 99th percentile. Not surprisingly, he exceeded standards by scoring over an 850 (800 is passing) on all of his Science and Social Studies CRCTs.

The CRCTs are standardized benchmark assessments used by schools to measure student achievement on academic content standards. A score of 800 is considered to indicate a satisfactory level of competency. Scores over 850 indicate that a student has surpassed competency requirements. Percentile rank scores are not calculated for these tests as they are with norm reference assessments, but based on the frequency of students obtaining an exceeding score, it is fair to say scores over 850 are not common.

In the classroom, Adams achievement has steadily declined over the years. Adam's grades in middle school were in the A range but since starting high school, he had barely maintained a C average. Behaviorally, Adam had struggled. He had eight behavioral referrals in his first two years of high school. The behaviors that he was referred for were: bullying, fighting, disrespect to staff, and disobedience by repeatedly using his cell phone in class.

When I started to get to know Adam at the onset of the study, I gave him an interest inventory to complete, the Secondary Interest Alyzer (Hébert, Sorensen & Renzulli, 1997). This inventory revealed that Adam had a wide variety of interests including: computers, science,

music, and psychology. It also indicated that Adam had benefited from an extensive cultural exposure. He showed both an interest in and knowledge of history, fine arts, and international politics.

Adam expressed a desire to do important things such as; design a computer that could repair itself, cure diseases, and design computer games that could help others learn and better themselves. His biggest interest for doing something important, however, was in the area of helping others who suffered from dysfunctional families and emotional abuse. Adam shared that due to personal experience, this was an issue of vital importance to him. This became the focus of his Type III investigation. Adam set out to produce a video in which he would interview students who could speak about the issue of family dysfunction and how it affected their performance in school.

Before Adam began the search for prospective students for his study, he embarked on a review of relevant research in which he and I found articles from professional journals and publications that would allow him to build up a knowledge base in this area and give him a direction as he proceeded with this endeavor. Since the final product was to be a video, he was paired up with the Broadcast Video teacher from the school, Mr. Green.

Portrait of Adam's Mentor: Mr. Green

Mr. Green taught Broadcast Video Production (BVP) at the school where the study was conducted. Mr. Green was a lean, physically fit, Caucasian in his late 40's. His BVP classes were very popular and allowed students to work with some of the best resources the school has to offer. Besides the obvious video recording equipment, there was a full computer lab where students learned to preview, edit, and produce their videos. The school was also equipped with a

full broadcast studio where announcements were broadcast live and other short films and recordings were created. It was common to see students throughout the school recording films and footage for this class.

Mr. Green began his career education after a career in broadcasting that spanned over 20 years. Besides having extensive knowledge about video broadcasting, he was one of the few people I have met who seemed to have a natural talent for teaching and relating to students without having any formal education background or training. Mr. Green had a very warm and inviting demeanor and seemed to always be in a good mood. He was always professionally dressed, usually with a tie, which he explained as important since he teaches students to work in a professional environment. Having known Mr. Green for more than a year, I knew that he would be a good candidate for being a mentor for this study if any of the participants showed an interest in BVP.

When I presented Adam's interest of making a documentary about dysfunctional relationships, Mr. Green jumped at the chance to mentor him. Indeed this partnership went very well and both Adam and Mr. Green benefited from and enjoyed this experience.

Miranda: "I fight with my mom all of the time."

I met Miranda during the first week of school due to an incident in Physical Education class where she and another girl had almost gotten into a fight. My first impression of Miranda was that she looked much older and bigger than an average 14 year-old 9th grader. Miranda was Caucasian with a tan complexion and a charming smile. Although she was a little overweight, she had pretty features and could be very charming. She described herself as a "Diva". Initially she had an, "I don't care, I will do what I want" attitude. She did not have remorse for her actions when confronted by one of the school's assistant principals. I quickly learned that she is

known for her sharp tongue towards teachers and for having an explosive temper when angry. She had a long list of behavior referrals from middle school and already had two discipline referrals in her first two weeks of high school. When I met with Miranda after things cooled down, I realized that she was actually very uneasy and soft-spoken in casual conversation. Her private persona did not match her public one by any means.

Academically, Miranda had been served in the gifted program since 6th grade. She had exceeded standards on all of her middle school CRCTs and ranked in the 90th percentile or higher on all sub scales of the state administered benchmark standardized test. Her grades however, reflected a different story. She routinely had grades in the B and C range.

Miranda's biggest challenge, however, was her relationship with her mother. Discussions with Miranda and her counselors revealed a long history of conflict, some of which had been physical in nature. Miranda's mother had resorted to calling the police when Miranda would not comply with household rules. Miranda stated that she and her mother never have gotten along and that she had, "never done anything right in my momma's eyes."

One very important dimension to this troubled relationship was the fact that Miranda had a twin sister. Miranda and her twin could not be more different and, in fact, are the complete opposite of each other in many ways. Miranda's twin sister had never been in trouble at school or at home. "My mom thinks she is an angel," Miranda said. There were also some physical differences between Miranda and her twin sister. Miranda had an athletic frame but was overweight for her age and height. Her sister was very lean and slender, maybe even a little underweight. Miranda never spoke to me about this difference of how much this contrast played into this difficult relationship. The school counselors and administration indicated that Miranda was very insecure about her weight and there was reason to believe that her mother made abusive

comments about it to Miranda. I also learned that there was an open Department of Family and Children Services (DFACS) case with this family as there had been reports of physical confrontations between Miranda and her mother.

When I approached Miranda about participating in the study, she showed a sense of pride at being considered a high ability student with potential. It appeared to me that she had not been thought of in a positive light by anyone in some time. She was very honest about her behavior problems and although she usually felt justified for her inappropriate actions, she admitted that she had an anger management problem. She also knew that she had a problem dealing with authority, which she attributed to her strained relationship with her mother. I found myself in an awkward situation when talking with Miranda about her mother. I had already been told a great deal about the challenges that she and her mother were facing but was unable to get Miranda to tell me very much directly about what was really going on.

I began to focus more on Miranda's body language and other non verbal clues as a way to interpret and give meaning to her responses and comments. When I asked her a question about her mother or twin sister I would pause or work at my computer so I was not facing her directly or making her feel like I was waiting for a response. On one occasion when I knew that Miranda and her mother had been in a physical altercation which had resulted in Miranda being arrested, I asked her, "How's it going with you and your mom?" She breathed out a short response, "fine." I could tell by her tone and her eyes that things were not fine. Needless to say I did not probe any further as I did not need any more evidence to know that Miranda needed a caring relationship with a positive female role model.

When we got into discussing the study, Miranda was eager to participate and was looking forward to getting to be out of class. She told me that, "I only like my English teacher, the others

get on my nerves and write me up for nothing." When Miranda and I sat down together and started to look at her strengths and interests revealed from the Secondary Interest-A-Lyzer it became clear that her most significant interest was in working with animals. She wanted to be a veterinarian. She also showed an interest in helping or serving others who were less fortunate than her. This revelation prompted me to talk to the small animal and veterinary science teacher, Ms. Clay.

Portrait of Miranda's Mentor: Ms. Clay

I approached Ms. Clay to discuss her possible participation in the study and quickly realized that she and Miranda would be a great team. Prior to teaching in the Agricultural department of our school, Ms. Clay had worked in a variety of small and large animal settings. She had extensive experience in animal care and grooming, as well as connections to various humane society groups, shelters, and rescue organizations. As I described Miranda and her family situation to Ms. Clay, I sensed a beacon of empathy and concern. I could see that Ms.Clay's nurturing compassion extended to her students as well as her animals. She was thrilled to work with Miranda.

Miranda and Ms. Clay became acquainted as Miranda would make regular class visits to the small animal class. Miranda was scheduled as an office-aid and I was able to arrange these visitations with her supervising teacher. Miranda's grade in the office-aid class was based on her participation with Ms. Clay. Miranda and Ms. Clay discussed several different ideas for her Type III investigation, including volunteering at a rescue shelter, conducting animal exposure therapy with children and special needs students, and volunteering with the spaying and neuter efforts in the local community. After considering transportation, time, and family demands, it was decided that Miranda would learn about animal therapy and use the small animal class to

provide small animal therapy with special needs students and children from the school-based day care center. This service played into Miranda's interest and knowledge of animals and her desire to help others.

Deon: "I am a good student but I am not a good student."

I have known Deon since he was in the 9th grade. Both he and his identical twin brother are standout multi-sport athletes at our school. Deon was a handsome, charming, charismatic, African-American, 17 year-old, 11th grader. Deon was a sharp dresser with a short haircut and a cleanly trimmed mustache. He was always surrounded by a group of friends and was popular with students and teachers. His coaches were constantly singing his praises as he excelled in football, basketball, and track. His demeanor displayed confidence and, at times, cockiness. When he was redirected or corrected by teachers, he was quick to talk back and had developed a reputation as having an attitude problem.

Deon had a very long record of discipline referrals dating from middle school, most of which were for disrespect, fighting, bullying, and failure to follow directions. I witnessed his volatile behavior on a few occasions in the cafeteria, and hallway. I heard accounts from some of his teachers who described him as very smart and capable, yet defiant and immature when it came to following directions and controlling his comments in class.

Anyone who meets Deon and talks to him long enough will be able to see that he has a superb intellect and quick wit. All of his teachers can attest to this but most report that his performance does not match his potential. When reviewing Deon's academic record, it appeared that his underachievement began in middle school. Deon's standardized testing from elementary school revealed that he consistently exceeded standards on the Reading and Math portions of the Criterion Reference Competency Test (CRCT). In middle school, these scores appeared to

decline. He only exceeded CRCT expectations on one Reading and one Science test. His Iowa Test of Basic Skills (ITBS) scores from middle school however, showed a strength in science where he scored in the 90th percentile and was close to the 90th percentile in math.

Deon's achievement pattern was still on the decline as he had earned low, and at times failing, grades and test scores for the End of Course Test (EOCT). When I began to work with Deon for the study, it was one of the first things I asked him. He said that he could not stand to work on "meaningless" assignments and "busy work." As one might expect from an athlete, Deon hated sitting at his desk for long periods of time while the teacher talked. He preferred hands-on activities and making things.

During the pre-intervention interview Deon described himself as a, "good student, but not a good student." He was well aware that he had achieved highly in the past and still had the potential to do so. Although he did not take all of the blame for his behavior, he knew that it was interfering with his academic progress. I was encouraged to see that he had this level of awareness about himself. We proceeded to completing the interest inventory where not surprisingly, it indicated that Deon had a huge interest in and knowledge about sports.

We searched for a way to incorporate sports into the Type III investigation. I asked Deon what kind of problems he saw as an athlete that he felt needed solutions. He thought of many areas that could be addressed. He thought about sports safety related to training, heat-related injuries, issues related to college recruiting, the challenge of balancing academics and athletics, and the importance of ethical coaching in little league sports. I knew that one of the school's coaches would be a good mentor for Deon and we would need a coach's insight into formulating Deon's areas of concern into a Type III investigation.

One of Deon's football coaches, Coach Edmonds, agreed to mentor Deon through the experience. After talking with Deon and reviewing the interest inventory information, Deon and Coach Edmonds decided to research and investigate policies and actions of athletic departments and coaches that increase the risk of injury. That included certain training activities and methods that make injury more likely. Deon also wanted to find out how to reduce some of the detrimental effects on high school athletes that are sometimes associated with college recruiting. Finally, Deon wanted to be able to bring all of his information and findings together into a presentation that would be appropriate for coaches, parents, and athletes at the high school and college level. He also considered making a video and a supplemental pamphlet. His goal was to provide information that would make high school sports safer and more conducive to the academic and social aspects of high school athletes.

Portrait of Deon's Mentor: Coach Edmonds

Coach Edmonds began his career in teaching after serving in the Army. A veteran of the war in Iraq, Coach Edmonds looked and carried himself with the muscular build and confidence one would expect from a soldier. Coach Edmonds was an excellent choice of mentor for Deon in many ways. Like Deon, he was a fellow African-American. Deon did not have the presence of a male role model in his household for many years and as his coach, Mr. Edmonds had a very good relationship and rapport with Deon before the study started. Coach Edmonds was very interested in the Type III and was well aware that Deon was not reaching his potential academically or behaviorally. As a former high school and college athlete, he knew that Deon's choice for his investigation was a worthy one. He was excited to have the opportunity to be a part of this experience.

Brian: "I have failed all my grades but was passed due to test scores."

This quote sums up Brian's school experience since elementary school. Brian was friendly, charming and very polite. He was a brown-haired, 16 year-old, Caucasian with a bouncy stride and a friendly attitude. He simply did not like to do any work that he couldn't see a "reason" behind. That was the way he felt about school. He stated, "I have always been able to pass classes and tests without doing any work." A recent example of this was last year in Accelerated Math I. He scored a 90 on the End of Course Test but failed the class with a 35 because he did not complete many assignments. When Brian was not working, he tended to get into trouble.

Brian's teachers all described him as likable and witty. He was respectful about his lack of assignment completion and did not routinely disrupt class. His teachers reported that he would simply fail to turn in assignments or take certain tests and quizzes. They all reported, however, that Brian was routinely one of the most insightful and frequent contributors to class discussions. Everyone who knew Brian could attest to his intelligence, yet they also shared examples of how Brian's lack of productivity in class led to confrontations between him and his teachers. Brian also had a pattern of misbehavior during transitions such as class changes and lunch.

Brian had accumulated dozens of office referrals since his middle school days. Most of his referrals were for talking back to teachers, refusing to follow directions, and being chronically tardy or skipping class. Since Brian started high school, he had become a permanent fixture in In-School Suspension (ISS) where he would quietly sit and read a Stephen King novel while his class assignments sat untouched under his desk.

Like the other participants in the study , Brian had a history of very high test scores with many Criterion Reference Competency Tests exceeding expectations as well as End of Course

Tests where he routinely scored in the upper percentiles despite failing grades due to lack of assignment completion. His Iowa Test of Basic Skills scores from middle school were all above the 90th percentile or higher. Despite his capabilities, Brian had no desire to do anything that he did not perceive as having a clear purpose.

When we began the interest inventory process, it was clear that Brian had a great many ideas about what he wanted to do and explore. He had an interest in science, especially chemistry. He stated that one of his possible goals in life would be to find a cure for a disease or develop an anti-aging drug. Brian actually had no problem thinking of things he would like to do after high school and he was aware that his current level of achievement would not get him into college, much less lead to any advanced degree that many of his career aspirations would require.

Despite his multiple career goals, Brian was initially at a loss for finding a real world problem to solve. When it came to focusing on a problem to investigate in the Type III, Brian struggled to identify something he could pursue in the school setting. The one recurring theme that Brian communicated in this process was his discontent over what he communicated as the lack of practicality and usefulness of the bulk of classroom assignments throughout his school career. He liked to talk and joke around with his friends and he was very social. The direction of his Type III was initially difficult to determine.

Knowing that Brian was interested in chemistry, I spoke to his chemistry teacher, who I had already identified as a potential mentor for Brian before I knew he was enrolled in his class.

Portrait of Brian's Mentor: Mr. Linder

I had known Mr. Linder since I started working at our school. He and I had previously made the connection that we were both from Texas and former Navy veterans. Mr. Linder had

come into teaching as a second career after a long career as a nuclear engineer and a chemist in the private sector. Mr. Linder was a Caucasian gentleman in his mid-50‘s. He was a very popular teacher with students and staff and had a very approachable demeanor and charming sense of humor. Students reported that his lessons were dynamic and he made them interesting and engaging. That may explain why his was one of the few classes that Brian was doing well in at the time. When I described my study and mentioned that Brian was a participant, he immediately confided that Brian was always volunteering to help other students and was the class tutor when there were group assignments. Brian wanted to solve the problem that some students experience when they do not relate well with teachers. Some students seem to learn better from their peers than from teachers. This became the thrust of Brian’s Type III investigation.

Brian’s service was to become a student tutor for chemistry and math. The problem he wanted to solve was related to the fact that some students this age learn better from their peers instead of teachers. He set out to remedy this by working with classmates in his chemistry class and tutoring students after school in math. He also worked individually with special education students on test preparation and homework completion.

Tony: “I think there is a lot of unnecessary work.”

I met Tony at the beginning of the school year when he was referred for special education due to a recent diagnosis of Asperger’s Syndrome. Tony had withdrawn from our school after 9th grade with failing grades and several behavioral referrals for not following directions, not responding to teachers when spoken to, and leaving class without permission. His mother enrolled him in a nearby private school for his 10th grade year. With the newfound knowledge about his Asperger’s and relief from a psychological diagnosis, Tony’s mother wanted to give public school another try.

Tony was a tall, thin, shaggy-haired, 17 year-old, Caucasian 10th grader who rarely made eye contact and spoke with a fearful whisper. Tony was known by his peers as, "the boy who doesn't talk." His shy and quiet demeanor, however, hid an amazing intellect. Tony exceeded expectations on every CRCT taken in middle school and scored in the 95th percentile of his middle school ITBS. Since returning to his original high school school and being recognized as having high potential, I arranged for Tony to take advanced courses that would challenge him more. At the onset of the study, he was making straight A's in these advanced courses. One of his previous complaints about school had been that he felt like there was, "a lot of unnecessary work." He said he was able to learn on his own without doing all of the boring work.

Neither Tony nor his mother had ever considered that he might be gifted. When I asked him about participating in this study, he was eager to do it because he felt it would get him out of class, which he believed was a waste of time. When we began the interest inventory process and problem identification, I realized that Tony would need a great deal of guidance in determining how to proceed with his Type III. Certainly a function of his disability, Tony was not able to effectively conceptualize a real world problem that he could solve. I was able to guide him in identifying things that he did not like and was opposed to, but when it came to stating something that he did like and could do, he continually drew a blank.

Realizing that thinking about the "big picture" or anything outside of his immediate environment was a challenge for Tony, I started to focus on what he could do within the school. Tony's favorite hobby was reading and he was upset that there was not a book club at the school. Since he was taking a literature course, I approached his teacher about what it would take to get that started. She agreed to help Tony start a book club. They agreed to advertise and set it up together. Tony would develop the book lists and help plan the meetings and discussion topics.

Being a very shy introverted person, this seemed to be a daunting task but Tony was excited about the possibility of having a forum where voracious readers like him could get together and share their love of literature.

Portrait of Tony's Mentor: Ms. Martin

Ms. Martin was a veteran English teacher with over 20 years of experience. This soft-spoken Caucasian was very well respected by her peers and adored by her students. She epitomized the description of an effective teacher in that she was strict and challenging, yet liked by students. She had a reserved and quiet personality but was known to have a funny sense of humor when she was not in the classroom spotlight. She did not push Tony socially and helped him build rapport with students who were sensitive to his shy nature. She enjoyed him as a student and had been thinking about starting a book club for some time. She was thrilled to have a good reason and helper to start one now.

Final Thoughts

These five students and five mentor teachers embarked on a 16 week journey of investigation and relationship building as they collaborated in producing the final products or services that they had identified as solving an authentic problem or addressing a real need. Over the course of a semester, I met with, observed, communicated with, as well as problem solved with these five teams as they completed the Type III investigations. It was a wonderfully challenging, demanding, and at times frustrating journey but it proved to be a journey worth taking, as each participant enjoyed personal and professional benefits and growth that surpassed all expectations.

CHAPTER 5

FINDINGS

The School Experiences of High Ability Students with Behavioral Challenges

The students chosen to participate in this study represented a unique collection of bright young people with diverse backgrounds and expectations for the future. I will now present my findings and themes for each research question by providing evidence for these themes from the data I collected from interviews, observations, teacher reports, and results of the BASC-2 self, teacher, and parent reports.

My first research question attempted to answer the question of what factors contribute to underachievement with this population of students. Several themes ranging from boredom to family related difficulties and anger management issues were found to be relevant across participants. The main themes that related to my first research question are graphically presented in Figure 1.

Figure 1- Factors Contributing to Underachievement

Lack of Interest in Curriculum

All five participants expressed an observable lack of interest in the curriculum and content being offered in their classes. Each participant had interests that were related to some

content area found in the school setting, but none of them regularly found that assignments and projects were compelling enough to warrant the effort needed to complete them. Adam liked literature but did not enjoy what he viewed as trivial assignments. He explained, "If an assignment does not help me learn the material, I don't see why I need to do it." Both Brian and Tony liked science and math but had no desire to participate in the lessons and format that these subjects were presented in class. Brian said, "I can do most math problems in my head, I don't need to take notes." Tony found that he learned better on his own and did not need assignments. He confessed, "I would rather read the textbook on my own or write a research paper rather than work in class."

With the exception of certain vocational courses such as Broadcast Video Production, Veterinary Science, or Engineering Technology, there was a prevailing attitude among the group of five that what was taking place in class was not relevant, and they did not see the purpose in putting forth any effort. They all had the ability to make passing grades without much effort and consistently found themselves going through the motions.

There was plenty of evidence that spoke to this issue in the pre and post interviews. Brian said, "I like doing things with my hands not meaningless work." Tony, who would read Science textbooks that he would check out of the library for fun shared that, "I think there is a lot of unnecessary work; I won't cooperate if it is something I don't want to do." Adam, who had a strong interest in computers and psychology declared that he had, "no interest what so ever in classes." What I take from this is that these students were not engaged with the standardized curriculum offered in public schools. They wanted to do something real or pursue an area of interest in their own way. All of these participants had school-based interests however they had become numb to the instructional and curricular expectations. Deon felt that teachers were

sometimes just trying to, “keep kids busy.” He shared further by saying, “I have been asked to do something over before just because it did not take me long enough.” Miranda felt that teachers challenged her if she did not turn in an assignment. She said, “Teachers get mad because I don’t do the work and still ace the tests.” The consensus among this group was that there was a lot of wasted time and energy spent in class.

Self-Reports from the BASC-2 administered before the study began were reflective of this as measured by scores for Attitude to School, Attitude to Teachers, and Attention Problems and Hyperactivity. Elevated scores in these areas do not in themselves constitute or correlate to a specific lack of interest in curriculum per se. The connection that can be made from these scores. when taken in the context of interview statements, feedback from teachers, and previous grades and assignment completion rates, is that there is a measurable disconnect from school that is likely serving to exacerbate social and behavioral problems of the participants.

The most significant score in this area was obtained by Brian. His self-rated T score for Attitude to School was clinically significant (70 or higher) at 78. Deon and Miranda had scores in the at-risk range (60 or higher) at 63 and 69 respectively. Furthermore, Deon and Brian also had at-risk scores for Attitude to Teachers with scores in this area of 63 and 67. Adam and Tony did not have significant scores in this area but both had significant scores for attention problems. All of the students except for Tony had clinically significant scores for hyperactivity. These results’ influence and relevance is echoed in the forthcoming sections but have been reported here to present a backdrop of overall attitudes and functioning that relates to all facets of school functioning.

Unnecessary Assignments/Coursework not Challenging

All of the participants expressed that they were tired of class work and assignments that were not necessary for them to learn course content. I am reporting this as separate from the lack of interest in curriculum because even when participants felt engaged with the content, they found the unchallenging work to be a waste of time. Deon proclaimed, “I hate busy work.” He went on to say that when he was in class doing what he referred to as busy work, he tended to slip off task and get into trouble. He frustratingly admitted, “I get in trouble for not doing something that I already know how to do.” Brian also noted that even in a class where he may be interested, “If I don’t like the reasoning behind something I won’t do it.” This dilemma, for him, also led to opportunities for behavioral difficulties. Adam proclaimed that, “Most of the time I can finish homework in a few minutes so I would rather talk to my friends than do the work in class.” Miranda also echoed this sentiment when she said, “Some of the things they (teachers) ask us to do is an insult to my intelligence.” The crux of this theme speaks to the public school reality of having such a wide range of ability levels in the same classroom without having an equally wide range of curricular and pedagogical options available to address a variety of student needs.

This finding led me to ask each participant why they don’t take Advanced Content or Advanced Placement classes. Adam said, “I used to be in the gifted program and took those classes.” He went on to add, “I don’t see the reason in working harder to get the same credit I get in a regular class.” Tony was the only member of the study who was currently enrolled in Advanced Content courses. He said, “That is the only way I don’t get bored.” I had to clarify and speculated that Tony’s departure from the group’s mindset was related to the nature of his

Asperger's syndrome. Tony was not social at all and had no other interests outside of school. He seemed to love the challenge and complexity of the faster paced courses.

To sum up these curricular related themes, it was clear from interviews, observations, and reports from teachers that the students selected for this study frequently did not see the importance of what was being asked of them by their teachers. They all had ideas and interests that were related or directly applicable to school based content, but years of not believing in the purpose of school expectations had made them numb to school at best and cynical and belligerent towards it at worse.

Lack of Productivity Leads to Conflict

Every participant had, at one point in their school career, been written up or disciplined for not being on task or engaged in class. Each student could point to examples when they were confronted for not turning in or attending to assignments in class whether they were being disruptive or not. They could each also recall situations where their off-task behavior led to misbehavior situations that warranted teacher redirection. Adam, Tony, Brian, and Miranda all had been reported in disrespectful and defiant behavior referrals for not accepting redirection from teachers. Adam explained, "I always get in trouble during group work. I can always help everyone get finished quickly so we can talk, most teachers don't like that. Brian said, "I never take notes and I never need to, I can pass tests without them. I will usually goof off instead. Even if I sit quietly, I sometimes take heat from my teachers for not keeping up." Tony also had referrals for not following teacher directions. Upon further review of these instances, one can see that the function of this behavior for him as being someone on the Autism Spectrum is quite different, but on the surface it can appear to manifest in a similar fashion as the others.

The most troubling aspect of this common theme is that all of these participants began to expect things to go a certain way due to their chosen lack of productivity. Adam sadly confided, "I don't try anymore to be a good student." Before the investigations began, this was a prevailing notion of the group of five. Not one of them could remember having the feeling of or recall an example of being recognized for being successful or receiving their teachers' approval at school.

This sentiment is supported by another domain of functioning measured by the BASC-2 Teacher Report which is Conduct Problems. In this area, Adam was rated at risk by one teacher. Deon was rated at risk by one teacher and was rated clinically significant with a T score of 84 by another teacher. Brian had a T score for Conduct Problems of 73 as reported by one teacher as did Miranda who also scored a 73.

Poor Social Skills

The presence of social skill deficits is not limited to students with high ability, but a deficit in this area can have unique consequences for this group as they interact with peers and teachers. These five students with high ability felt like they had often been held to a higher level of expectations socially and behaviorally. Deon said he felt like his teachers were harder on him. He said with frustration, "Other kids can do something and not get in trouble but if I do it, I get called out the first time I do it." He continued, "They know I am smart so I guess they are harder on me." Miranda also felt like she was "picked on" by teachers. She reported that, "If I lose my temper or raise my voice then I'm the one that always get into trouble, not the other person." Indeed many teachers whose input was solicited for this study reported that deficits in the area of social functioning, especially as they related to interacting with and reacting to teachers in the classroom, were viewed as being more profound and disrespectful than similar maladaptive interactions and responses exhibited by peers of presumed lower ability.

One of Adam's teachers, when asked to provide some anecdotal information about his behavior and performance in class cried, "He can be so callous and rude, I don't know if he is aware of others' perceptions or not." She further explained, "He is making a 'B' in my class with hardly any effort at all, it is hard for me to believe that he does not have a better way of interacting with others." This sentiment was common among participants' current teachers although it appeared that there were some differences in why each of these students struggled in this area.

Tony's example is an easy one to start with as social and communication deficits are hallmark traits of Asperger's. Before he was diagnosed and teachers were informed of his disability, he routinely had conflict with teachers for not starting assignments and not speaking when spoken to. Tony's World History teacher gave him a discipline referral once when Tony refused to answer a simple question. The teacher stated, "I asked Tony several times if he had his homework and he looked away and did not answer. I wrote him up for disrespect."

Brian's and Adam's social struggles seemed to be related to a combination of asynchronous intellectual development and their admitted proclivity to be class clowns and seek negative attention, a skill they acquired in middle school where it was no longer cool to be the smartest one in the class. "Adam can be very mean to other students," one of his former teachers reported. Another teacher said that Adam did not accept criticism or feedback very well either. "He gets defensive at the slightest things," she said. Miranda's and Deon's teachers also reported a deficit in the social interaction area. In general, these two students are viewed as being a little on the curt or abrupt side, which many will admit describes most teenagers at some point or another. Miranda's Physical Education teacher shared that, "She cannot joke around with the other students without becoming hostile, it doesn't make sense." Deon's math teacher said,

"Sometimes he uses a rude tone of voice but I don't think he knows it." It is the elevated ability and insight of these students that makes these weaknesses harder to tolerate for teachers.

An important point to make, which I believe speaks to another area of deficit to be discussed later, self-esteem, is that these social skill deficits did not appear when speaking and interacting one-on-one during this study. With the exception of Tony; Brian, Deon, Miranda, and Adam all were incredibly polite and charming when I met with them individually. This observation was mirrored by other teachers and the participants' parents alike. I learned that for Miranda, Adam, and Brian, the difficulty in dealing with authority in the presence of others may have been indicative of their stressed relationships with parents.

Anger Management Issues

One consistent theme that emerged from all of the data sources was that all of these participants had weaknesses in controlling their anger. Although they had individual differences in terms of the function and source of their anger management deficits, it was a salient issue for each of them. This issue was evidenced by their accounts of past events at school and they all admitted that anger played a large role in most, if not all, of their behavior referrals. One of Brian's self-described weaknesses was highlighted when he said, "I have a lot of anger issues and stuff like that." Deon disclosed during the pre-investigation interview that, "I have a bad attitude at times it sometimes it comes out too much."

Miranda's anger issues came out more when dealing with peers. She shared that she got in the most trouble when, "other people mess with me or look at me funny." She said that, "I don't care if I get in trouble, I'm not going to let anyone mess with me." Adam mentioned that his temper comes from his family life. He declared that he gets along with and likes his peers and teachers for the most part, but there are times when he cannot control his anger if there has been

conflict at home. “There are days when I know that I am going to blow up if anyone messes with me.” She said. His teachers also reported this to be the case. Adam’s chemistry teacher said, “Adam will sometimes be very moody and can be quite rude, other times he can be the most charming kid.” All of the participants struggled with controlling their emotions and behavior at times.

The past discipline records and referrals for each of these students had examples of behavior that was directly related to anger and an inability to control negative emotions. The data source that demonstrates this most effectively are the Self, Parent, and Teacher scoring reports from the BASC-2. In determining which domains to analyze that impacted emotions and behaviors related to anger management, I decided to include scores for Aggression, Depression, Anxiety, Hyperactivity, Locus of Control, and Social Stress. All five participants had scores that were at risk or clinically significant for these sub scales.

What was both interesting and informative was which reports gave the highest scores. For example, Miranda only had elevated T scores above 60 or 70 from the Parent form completed by her mother. Teacher reports for Miranda were not even close to being at risk. Miranda rated herself at a T score of 72 for Hyperactivity and Locus of Control. Adam’s Self rating yielded more at risk and clinical scores than any of his teachers or parents. Brian and Deon both received at-risk and clinical scores from teachers for these areas. Deon scored a T score of 98 for Aggression by one teacher and an 83 for Depression by another. Deon rated himself a T score of 75 for Anxiety and an 87 for Hyperactivity. Brian also rated himself high in these areas with either at risk or clinical for each. Anthony, who exhibited minimal interactions at school, was only rated high in these domains by his mother, which is not surprising given his level of social functioning.

These individual differences observed from different raters in different environments helped me to develop some insight about each student's personal history and how their behaviors were related to and affected by different settings and relationships. These relationships and their accompanying themes will be discussed individually.

Family Influence

Conflict with Family

Every family has its own unique history. These histories grow and are defined by the daily interactions and events that are specific to each family. As I began the pre interview process and got to know the individual participants, I immediately recognized the significance and impact that family relationships, both positive and negative, were having on the school experiences of each of the students. This influence was different for each family. I made a concerted effort to find out as much as I could about each family and how each family unit may be impacting the participants functioning and development. I found that family conflict had a significant influence on Miranda, Adam, and Brian. Deon's and Tony's family impact were related more to acute adversity rather than ongoing relational conflict.

It was not clear that one family's influence was more or less significant than another, but it appeared to me at the onset of the study that Miranda's home life seemed to be having the most significant impact on her performance at school compared to the other participants. As has been mentioned previously, Miranda and her mother had a documented pattern of emotional and physical conflict that had recently escalated to a level where DFACS, the Department of Juvenile Justice, school district level social services, and the school's counselors and administrators were heavily involved. Miranda was guarded with me when discussing her relationship with her

mother, but I was able to slowly pull out details and piece together a picture of a very strained and borderline abusive relationship where Miranda perceived that she was "always in the wrong" in the eyes of her mother.

Miranda was on probation for charges filed by her mother for being an, "unruly child." This offense stemmed from Miranda not following directions at home, leaving home without permission, and staying out of the house for more than 24 hours at a time. Miranda's mother had reported to the school's resource officer, administration, and counseling staff that Miranda regularly smoked marijuana and was often hanging out with individuals over the age of 18 who may have been contributing to other delinquent behavior that she did not approve of and was concerned about.

Miranda reported to the counseling department and DFACS that her mother was physically abusive and that they had had many bad fights. It appeared that this relationship was very unhealthy. Another significant dimension of this family's impact on Miranda was her relationship with her twin sister. Like Miranda, her twin sister was served in the gifted program but unlike Miranda, she had never been in trouble at school or at home as it appears. Also, while Miranda seemed to struggle with her weight and presented with low self-esteem, her sister was slim and confident and appeared to socialize with a different and more positive peer group. Having this knowledge and understanding of Miranda and her family was critical in setting the stage for developing a relationship with her mentor Ms. Clay, who was briefed on the relevant issues that related to her background and current family situation.

The significant role that family conflict plays in the underachievement patterns was also evident in Adam's family. One of the first things Adam told me was ,"I don't like my family." When I pressed for more information, he was a bit evasive, which was understandable. He lived

with his grandmother although he wanted to live with his father. He shared with me that his father was the, "only family member that he can get along with." When I asked Adam why he did not live with his father, he stated that his father was not allowed to have children living with him. I debated whether or not to press further and he appeared to be willing to share. I asked him how it came to be that his father could not have children living in his home and he said there had been a "gigantic misunderstanding" in the past and "lies were spread about my dad." Adam did not indicate that he wanted to speak more about the matter after this pronouncement so I decided not to probe any further.

I began to understand that the significance of this living arrangement and relationship with his grandmother may have been contributing to some of Adam's problems at school. According to some of our school's administrators who had dealt with Adam's behavior issues, Adam's grandmother routinely defended Adam, even in the face of serious allegations and reports from students and teachers some of which included bullying of middle school students on the bus, using profanity towards teachers, and delivering derogatory notes to teachers. On the handful of occasions when Adam was observed interacting with his grandmother in the presence of school staff, he was reported to have spoken very disrespectfully and condescendingly to her.

These observations are consistent with Adam's interactions with female teachers. He rarely, if ever, had serious behavior issues with male teachers. According to Adam's office referral history from the past three years, 90% of referrals were reported by female teachers. The few reports from male teachers were for minor offenses. This information was provided to Mr. Green as he began to work with and mentor Adam. This insight was very beneficial on several occasions throughout the course of the study as Adam had to work through this issue with one of his female teachers.

The issue of family conflict with Brian was also salient but did not appear as significant as the other participants in terms of conflict. When asked about his family in the pre investigation interview Brian said, “I get along with my mom not my dad.” He explained further that, “my dad and I have conflicting personalities.” As I asked more questions to learn about specific interactions he told me that, “they pretty much stay away from each other.” Brian said his dad stayed busy in the garage. Brian stated that he spent most of his free time away from the house and that he did not have much contact with his mom and dad except for the occasional dinner together. The school administrators who had contact with the family when Brian had been in trouble described his parents as very “laid back” and that they appeared to not be very concerned about Brian’s behavior and grades. When asked by an administrator, “What is the consequence for Brian if he does not do what you ask him to do or if he gets into trouble?” his mother answered, “Nothing, it wouldn’t help him anyway if we punished him.” The feeling that I got from this was that Brian was not held accountable by his family, which is how they possibly chose to avoid conflict. I was admittedly working with limited information, but Brian did not appear to be concerned about what his parents would or would not do in response to years of very low and failing grades combined with frequent behavior referrals. I realized that Brian’s family may be contributing to his difficulties by not being involved, which may be indicative of some larger family issue that I was not privy to. This information was important to note, and Mr. Linder realized that his role as mentor may be even more significant for Brian in the absence of parental concern and expectations.

Family Adversity

The theme of family adversity was significant for Tony and Deon. Their families did not appear to be experiencing significant conflict from any of the data I collected. What became

clear as the semester unfolded, was that both of these families had endured significant hardship in the past and, unfortunately, had to face additional trials and tragedy during the study. These past and current events had a significant impact on each student.

I had a distinct advantage when trying to describe and understand Tony's family unit. I had the most contact with his mother compared to other parents in the study. When Tony was re-enrolled at our school, I met his mother, who provided me a copy of Tony's psychological evaluation. As the special education coordinator, I routinely worked with students entering our school with a psychological diagnosis from a private practitioner. I met with Tony and his mother on several occasions and was able to build a level of rapport and insight that I was not able to with the other participants' families.

Tony's family consisted of Tony, his mother, and his younger brother. Although Tony never mentioned his grandfather to me, his mother told me that her father was the, "most important person in Tony's world." Tony's mother was very involved in his life, as one would expect any parent of a child with a disability. Tony's Asperger's was quite severe and he had many rituals and patterns that his mother had come to accommodate. I enjoyed working with his mother and commend her for getting her son as far as she had.

Despite her best efforts however, she was not able to keep Tony engaged in school during his freshman year. He basically stopped going to school in 9th grade until he was enrolled at a local private school. His mother shared with me that her father, Tony's grandfather, was the real enforcer in the household. Tragically, Tony's grandfather had a serious accident and was in intensive care on life support during most of the study. This had an enormous impact on Tony and he missed a fair amount of school to be with his grandfather in the hospital. Sadly, his

grandfather eventually passed away. Tony's academic and social progress was threatened but he was able to maintain solid grades and attendance with a great deal of support and sympathy from our teaching staff.

The issue of family conflict for Deon also did not fit the usual image of tension, fighting and disagreement; but his family experienced some adverse situations that also presented challenges for him. This was especially true during the course of this study. Deon's mother was a single parent who raised Deon, his identical twin, and a younger sibling. Deon reported that his family was, "good and close."

The most significant family issue for Deon during the study was that his twin brother had been expelled from school and was at home full time. This caused a strain on the family as his twin was also an athlete who could no longer participate and compete in school sports. Deon also shared that it was always hard enough getting motivated to come to school in the past but now that his brother and mother, who was unemployed, were both at home. He said it was harder and harder to get out the door each day.

Deon's family's biggest challenge evolved during the study when they were evicted and had to move in with other relatives. This was very difficult for Deon and his grades and behavior in class experienced a slight down turn, but through the help of Coach Edmonds and his other teachers, Deon was able to keep his grades up and avoid any serious problems during the course of the semester.

Low Self Esteem.

One of the most common observations I made when I became involved with these participants was that they all had a slight sense of unease and lack of confidence. Granted, I was already operating under the assumption that students who met the criteria for this study may

suffer from a lack of confidence. For the most part, each student had areas of confidence where they knew they had a relative strength, but their overall confidence and self-esteem across environments and with different individuals was low.

This overall feeling of inadequacy and lack of confidence was verified by BASC-2 Self report scores for Sense of Inadequacy. The following T scores at the onset of the study for this measure for each participant were as follows: Brian 70, Miranda 69, Deon 65, Tony 61, and Adam 51. Keeping in mind that T scores of 70 or higher are clinically significant and scores from 60-69 are at risk, one can see that this area is a weakness and concern for all. Although Adam's score was below these thresholds, it was on the higher end and should be considered a relevant score with respect to his overall profile. Despite their high ability and past documented high achievement, all five participants struggled with feeling adequate and confident. This certainly had an impact on their functioning and continued to contribute to their underachieving patterns.

It became evident that these students, consciously or not, were playing out a self-fulfilling prophecy of failure. As has been reported in their own words and paraphrased here, this prevailing attitude of, "I am not good, or I am not a good student" in some form or fashion had become part of their school identity and was wreaking havoc on their chances of reaching their highest potential.

A Turn in the Road

This was the baseline state of affairs when the study began. As the participants started to develop and work on their Type III investigations with their mentors, I began to see rays of light and hope that did not entirely blind the specters of underachievement and maladaptive behavior, but improvements were definitely observable. I saw that the former negative belief in self had

not been completely lost with this group. Despite the initial positivity, a total eclipse of underachievement and bad behavior had not yet appeared. We all trudged onward as the semester progressed and, with time, I saw and more light and spirit in the eyes of the five students.

This next section will examine the second research question that attempted to identify how pursuing a Type III investigation affects particular underachievement patterns in students with high potential and challenging behavior. These themes are presented below:

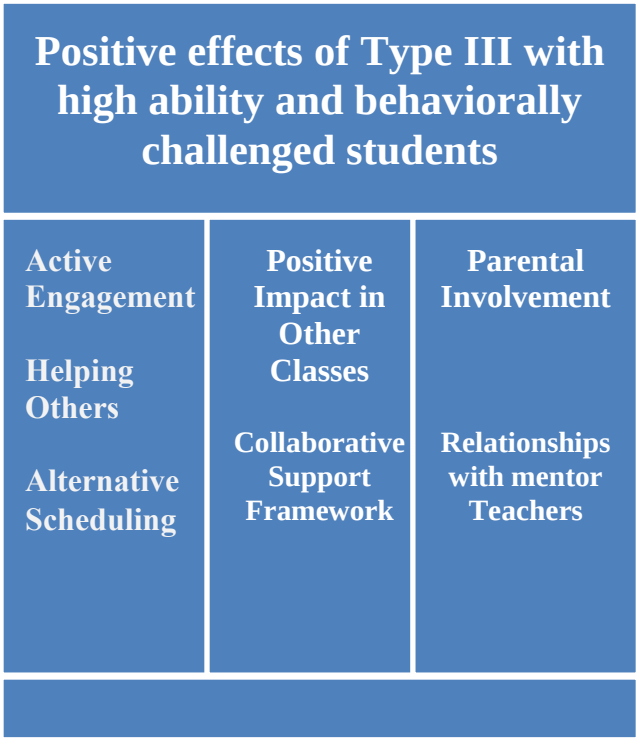

Figure 2 – Positive effects of Type III

Positive Effects of Type III

Active Engagement

It is not surprising that this aspect of the Type III investigation had the strongest presence in the data from student and mentor interviews and observations. Since the projects were selected

by the participants themselves and involved real life tasks and applications, this was one of the most promising benefits from this experience. The important revelation from this is that as the individual projects unfolded, which created more work and responsibility for each student along with their normal class work; their participation and grades in class either improved or were maintained, as well as their behavior in class.

Each project involved challenging work and scheduling arrangements for the students but they all believed that the extra challenge was worth having the opportunity to work on something meaningful. Deon stated that participation in the project, "Made me want to work harder, and do my work, and show like what my grades that I can actually, that I'm smarter than what I seemed that I am." Miranda felt proud of her efforts in using "puppy play" as a therapeutic activity for students with severe and profound cognitive disabilities. She shared a story about a student who was normally aggressive but had learned to be very gentle with the puppies and said, "Everyone thought that the girl would hurt the puppy but she petted it and laughed, no one could believe it." This experience fueled her desire to work harder so she could attend veterinary school. "I will work harder for good grades even if I am bored if I can learn to do something important like be a vet," she added.

Brian also responded well to the active engagement aspect of this and commented, "This gave me something that I kind of enjoy doing in school." He went on to proudly reflect about his peer tutoring services by saying, "I actually had a better time and more potential as a teacher and or tutor than I first expected." Adam also became immersed in his project and said with enthusiastic excitement, "When I actually like, did the video, like created it, um, I could really like feel myself in the work." Tony admitted that he enjoyed working to get the book club off of

the ground. He shared, “I like doing anything with books so it does not feel like work.” Deon, who loved anything to do with sports, did not regard the work on his project as an effort. “I could talk about sports all day,” he stated.

The post investigation interviews from the mentor teachers also supported the significance of active engagement as a benefit of the Type III investigation and as a support for classroom motivation in general. Mr. Green, who not only mentored Adam for the project, but had him as a BVP student as well felt that, “It helped him in my classroom, and, and perhaps helped me too.” Coach Edmonds discussed how this experience impacted Deon, who was a very active young man and whose biggest complaint was that he hated sitting at a desk and doing busy work. Coach Edmonds stated that, “Deon thrived on the thought of doing something important enough that others would find it useful.” He went on to say that one of Deon’s aspirations was to be a sports reporter or announcer. Deon felt that this project could be a “stepping stone” to other opportunities and explained, “If I don’t play football in college I will try to coach, everything I am learning with Coach Edmonds will help me later.”

Mr. Linder made similar observations about the influence of active engagement. He said that Brian, “wanted to talk to his friends one way or another, if he was engaged in assisting them with chemistry he was talking and doing something productive at the same time.” Ms. Clay also reported that the hands-on nature of working with animals benefited Miranda. She said, “I have never seen any of the negative behaviors that some of Miranda’s other teachers have reported, when she is busy with the animals she does not have time to get into trouble.”

Active engagement has been regarded as a dimension of effective instruction for all students but especially beneficial for students with disabilities and behavioral challenges (Hallahan & Kauffman, 1991; Wagner, 1991; Gallagher, 1997; Skiba & Peterson, 1999; Kemp,

2006). It came as no surprise to me that given the elevated T scores obtained by these participants for Hyperactivity, Aggressiveness, and Attention Problems, that the active and applied nature of this study would reap positive benefits.

Helping Others

The applied problem solving nature of the Type III implies that there is an inherent benefit to others. The focus of the Type III's was directly related to helping others. Adam produced a video to shed light on how abusive and dysfunctional family relationships can affect teenagers. He said he believes that, "my video can help other kids like me." Miranda worked with young children and students with disabilities using small animals like cats and dogs as therapeutic play and exposure. She said she felt important to the kids and believes she impressed her teachers. She recalled, "The kids got excited every time they came to see me. Brian tutored his fellow peers in math and science. He proudly pronounced that, "My friends said I was a better teacher than the real teachers." He added, "I think I helped some of them pass their End of Course Tests too." Tony started the school's first book club for reading enthusiasts. He said, "I can't believe no one has done this before me." Deon set out to make high school athletics safer and the transition to college more transparent and gradual for student athletes. Deon wished that, "Other athletes that come through high school won't have to go through some of the stuff I had to, you know."

One of the many affective measures that saw improvement at the conclusion of this study was Sense of Inadequacy. For comparison and review purposes, the following T scores at the onset of the study for this measure for each participant were as follows: Brian 70, Miranda 69, Deon 65, Tony 61, and Adam 51. At the conclusion of the independent projects, every participant reported improvement in this measure although some more than others. The post

study scores by participant for Sense of Inadequacy were: Brian 61, Miranda 65, Deon 62, and Adam 45. These improvements may not appear to be significant but taking into account the four month time span of the comparison, and the fact that Brian's score went from being clinically significant to the low at risk range, suggests that a small positive impact was made.

Alternative Scheduling

The Type III investigations and resulting products were completed over a 16 week period. Each participant and mentor team collaborated and negotiated the times when they worked together and the times when they worked independently. Some teams worked out a regular schedule for their work on project development. Mr. Green and Adam had one BVP class together which gave them some time to work and they also saw each other routinely during Mr. Green's planning period. This was arranged with Adam's Family Consumer Science (FCS) teacher, who early on, recognized that Adam was able to complete assignments and projects for her class independently. She and Adam had some potentially conflict-inducing situations early in the semester, which Mr. Green and I were aware of. This regular "break" from her class gave Adam and Mr. Green an opportunity to work on the project and talk about the touchy relationship between Adam and his FCS teacher.

The flexible scheduling aspect of implementing these experiences also proved helpful to Miranda, who was having a tough time with one of her classes at the beginning of the study. Miranda had originally been scheduled for art. She hated art and soon began to "hate" her art teacher. In fact, she had already received an office referral from the art teacher two times in the first three weeks of school. When one of the school's administrators and I met with the art teacher to discuss Miranda and her behavior, we realized that several things were going on that were likely contributing to Miranda's issues in art. There were some other students who Miranda

had conflict with and that seemed to be too much for Miranda to handle given her behavioral and social deficits. She simply could not control her anger when comments were made to her by others.

Given the dynamic and loosely-structured nature of the art class, it appeared that there were many opportunities for less than perfect social interactions. Miranda also had made up her mind that she did not like the art teacher and that, "She don't like me either." This was not the case with some of Miranda's teachers. This was the only class she was having problems in at the time so in the interests of helping her during the tough time and giving her some flexibility to work on her Type III, I scheduled Miranda as an office-aid so she would be free to work with Ms. Clay every day for one entire class period. Miranda was obviously very happy about this arrangement and found herself working with animals and young children instead of being in a class in which she did not like the content, the teacher, or the students. This change helped gave Miranda some immediate relief and allowed her to pursue her project without interfering with her other classes.

Brian also benefited from the flexibility of the freedom to make agreed upon arrangements to pursue his Type III. Brian and his mentor, Mr. Linder, also had a Chemistry class together in which Brian conducted part of his tutoring with his peers. To extend Brian's peer tutoring expertise to other students in the school, he needed to be able to spend time out of class in two of his other regularly scheduled classes. His literature and Spanish teachers both allowed Brian to do this as he was able to progress in each class without being regularly present. Both teachers commented that Brian seemed able to complete assignments on his own and did not appear to benefit from or need instruction from them. His Literature teacher said it best by stating "If Brian

wants to do well, he is more than capable of doing it on his own. If he knows what the expectation for a project or assignment is, he does it, or he doesn't do it, I do not seem to be part of the equation for him."

This break in the routine and flexible freedom was critical for Brian's success in his Type III. More importantly, it got him out of what he called "boring situations," which, in the past, had tended to lead to behavioral issues and confrontations with peers and teachers. The other indirect benefit to Brian being able to spend more time helping others is that he seemed to feel an immediate boost of confidence and sense of importance as his other teachers and other school staff became aware of his tutoring efforts. One of the most influential moments of this experience for Brian was when one the school administrators, who was used to handling his behavior referrals, saw Brian and I in the hall together and asked, "Is he was in trouble again?" As I described his project, I could see the pride in both the administrator Brian's eyes as this positive encounter took place. "I have never doubted this young man's intelligence," the administrator exclaimed, "Good for you Brian!" This interaction had an enormously positive impact on Brian.

Tony and Deon worked out their meeting times with their mentors in a different way. Coach Edmonds coached Deon in football which was in season during the study. Coach Edmonds, who worked as a special education collaborative teacher, enjoyed some flexibility in his own schedule and was able to pull Deon from time to time to work on his project. This also allowed Deon, like the others in the study, to selectively miss class with teacher approval, which often gave him a break from a subject or teacher that could have continued to contribute to his challenging behavior instead of giving him the opportunity to develop his positive behavioral repertoire.

Tony and his mentor Ms. Martin met during her planning time when they had to meet face-to-face. Tony was given free reign by his teachers to work outside of class as he created flyers, researched and developed reading lists, and hung his flyers throughout the school. This flexibility was very advantageous for Tony, who preferred to be alone and work independently instead of being in a crowded class. Tony's favorite private work space was the conference room adjacent to my office. When he was not working on a book club related activity, Tony would read or complete assignments for class. This finding of benefits gained from the ability to have flexibility in scheduling was found from mostly observational data. All five participants had the ability to work independently when needed and all experienced positive results by having a more dynamic daily routine throughout this experience.

Positive Impact in Other Classes

One of the many benefits of this experience that may be the hardest to measure is the positive impact that participation in this study had on the participants' performance in their regular classes and their relationships with their teachers. I observed this at the onset of the study when I contacted each of the participants' classroom teachers to inform them of their participation and make them aware of the behavioral and academic expectations that were required to be able to participate throughout the semester. Many teachers expressed positive comments and hopes for the chosen students. All of the participants' teachers were willing to cooperate and many communicated praise and a certain position of status to the students for being chosen. The participants themselves expressed a sense of pride at being selected.

I think one of the most significant factors that supported the success of this study is that all of the teachers involved, not just the mentors, wanted the students to be successful. Brian's

Spanish teacher's desire for his success was shared by many of the other participants' teachers as well. She exclaimed, "Maybe this will be just the thing he needs to realize what he is capable of." The classroom teachers of these five students were able to easily recognize that they needed help and that participation in this study could potentially provide support for them in a way that participation in a traditional class could not. I observed that many teachers may have become more patient and willing to overlook certain interfering behaviors and interactions that they may not have normally ignored. The participants themselves had pledged as part of their participation in the study to behave better and work harder in class. In addition, the mentor teachers and I had frequent contact with the teachers and were able to intervene if and when a potential issue arose. All of these motivations by teachers and students may have helped the participants maintain better classroom behavior and grades while the study was in progress.

The data that can be presented to highlight this successful classroom performance aspect of participating in the Type IIIs is that there was global improvement in grades and behavior during the course of the study, and more so than they had experienced in the previous two years. The only behavioral issues exhibited by any of the five participants were minor. There were a few reports of tardiness, a couple of reports of using a cell phone in class, and a handful of minor disturbances, usually for talking or laughing in class. During the course of the study, there were no behavioral reports or referrals for any of the "Destructive D's" type of behavior that had qualified each participant for the study. The collaborative system of support that was created from this arrangement appeared powerful in remediating the deficits these students displayed when they were selected for the study.

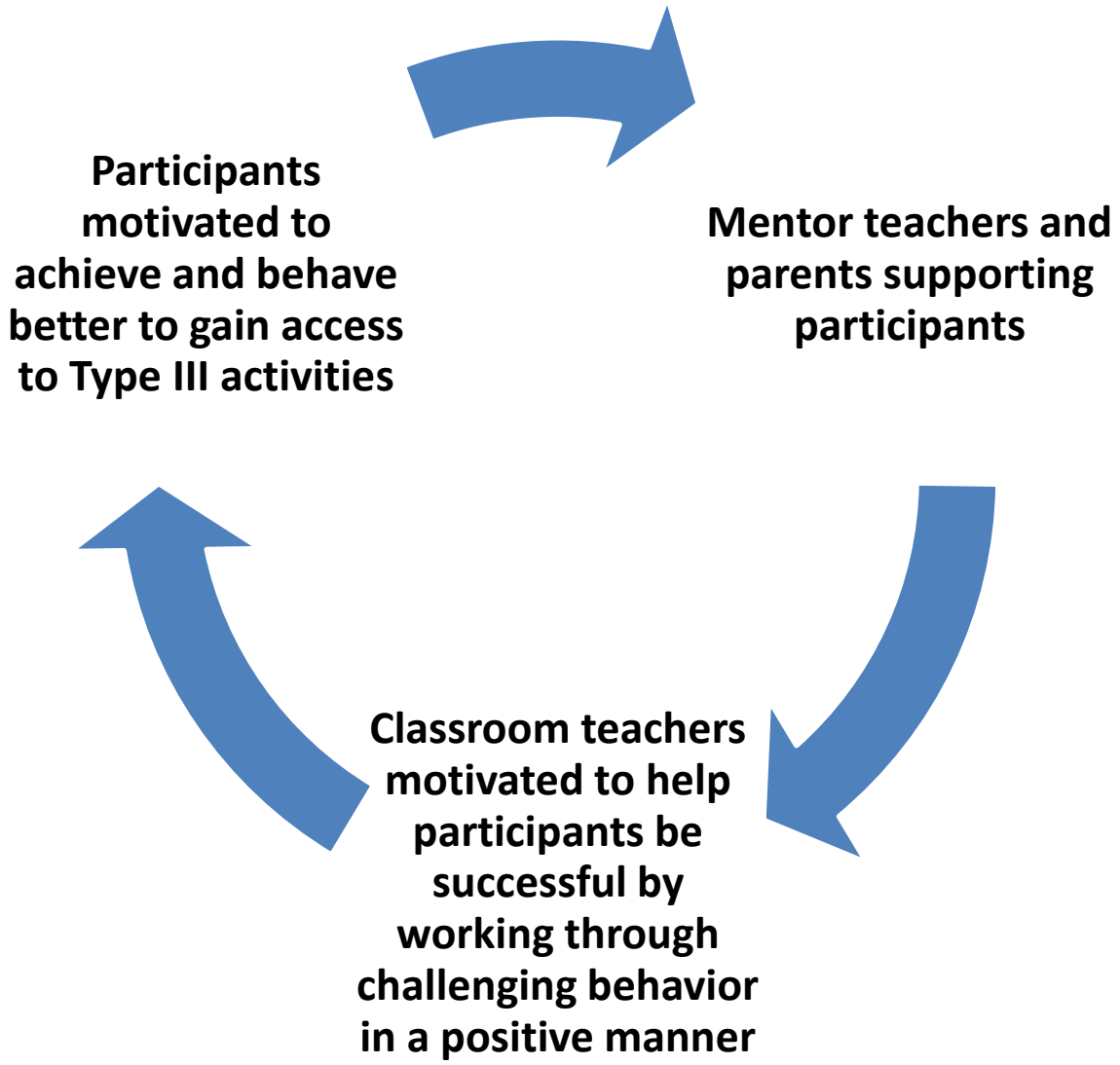

Figure 3 – Collaborative Support Framework

Collaborative Support Framework

Parental Involvement

Parental involvement in the education process has long been recognized as a significant factor in success or failure. For the purposes of this study, parental involvement was important, and I took steps to maintain contact with parents throughout the Type III process. This

involvement began when the parents where approached to obtain consent for their child's participation in the study. All of the parents of the participants were very enthusiastic, although they all had questions and concerns about how participation in the Type III study might interfere with classroom obligations and assignment completion. The arrangements that had been made were explained and the parents all consented since they felt the potential benefits of the study would outweigh any challenges that might ensue.

The next step in developing parent involvement was getting one parent from each family to complete the Parent Report of the BASC-2. The scoring summaries from these were important for me to understand the relationships between the families and the students. Obtaining the completed Parent Reports from the participants' parents shed light on the nature and level of parental involvement. Some were returned quickly, others were not. Deon's mother, for example did not return the Parent Report for almost two weeks and only after multiple phone calls and notes sent home via Deon. Ultimately, I cannot discern whether Deon was being forgetful, or whether his mother was unable or unwilling to return it sooner. Tony's mother, on the other hand, returned hers to me the next day in person. Adam's and Miranda's families were fairly prompt whereas Brian's took over a week to return theirs'. This initial experience set the tone in terms of family contact for the rest of the study. I found that these patterns within the different families to be fairly consistent though out the semester.

As the study progressed, I had differing amounts of contact with the parents. I had the most contact with Tony's mother, as there were several adjustments and issues that needed to be addressed for him along with issues related to his Type III. He had a difficult time in deciding what to do for his project and I spoke with his mother frequently during the early stages. I also spoke to and communicated through email with Tony's mom 2-3 times a week for one reason or

another. Tony needed frequent support and encouragement to attend class regularly and without being tardy. When his grandfather became seriously injured, he missed several days of school and fell behind. I communicated and coordinated with his teachers to make accommodations and arrangements for him to get caught up during this ordeal. One of the emails I received from Tony's mom summed up our collaboration and her appreciation of everyone's efforts.

"Mr. Davis,

I cannot thank you and your teaching staff enough for everything you all have done for Tony this semester. I have never worked with a group of teachers who were so willing to help a student like Tony. I know that Tony does not know how to show his appreciation and emotions but I can tell you for sure that he is grateful for what has been done for him. Please accept my most sincere gratitude for making my son's life better.

Sincerely,

Angie McGee" (pseudonym)

The level of contact I had with each family varied. I had the least contact with Deon's mother. I was not able to reach her by phone on a regular basis and it took substantial time to get the post intervention Parent Report returned just as it did at the beginning of the study. I found out over the course of the study that Deon's mother had been overwhelmed with trying to find a job and trying to keep her home. When Deon's family had to relocate, I spoke with his mother by phone on two occasions as she described what he was going through. She also asked me to touch base with his teachers and let them know what was happening so he could be allowed some extra time on assignments as needed This dilemma weighed heavily on Deon.

As the projects for all students were progressing, I made monthly contact with all of the parents. The mentor teachers also had some intermittent contact. Adam's and Brian's families were easy to contact and seemed to be supportive. Adam's family seemed to be well informed and involved with his progress in his video development. Brian's family on the other hand, seemed to be unaware of what he was doing as evidenced by a phone conversation I had with his mother. As the study was coming to an end she had called me and asked, "When is Brian going to start the project?" Surprised, I told her that, "he had been tutoring students all semester." She told me that she, "had no idea." I found that to support my theory that the may have been a lack of parental involvement in Brian's family.

The situation with Miranda was quite different. Given the tenuous nature of Miranda's relationship with her mother, I made weekly phone calls to provide positive support for Miranda. Her mother seemed to appreciate these reports, but I am disappointed to report that the relationship between Miranda and her mother continued to disintegrate as the semester progressed. It had been reported to our counselors and administrators that Miranda's mother had Miranda placed in juvenile custody after multiple incidents involving physical confrontations.

One conclusion that can be made about parent involvement, despite the level of involvement or support, is that each parent was aware of and proud that their child had been selected and was attempting a challenging endeavor. I do not have a way to measure how or to what extent this study impacted relations and interactions at home aside from the fact that there was slight improvement in T scores for the observed domains on the BASC-2 Parent Report. These improvements alone may not constitute significance but when viewed in addition to the

positive parent comments about this experience, it is appropriate to report that regardless of the level of contact or involvement, the parents and families of the five students played a role in helping them reach the end.

Relationships with Mentor Teachers

One of the fundamental cornerstones of the Type III experience is the collaboration and relationship between the mentor teacher and the student. Knowing how central the mentor relationship is to having a successful Type III experience, I went to great lengths to match these mentors and participants so that the relationships could benefit the students. This process began the year before the study was scheduled to begin. I already had some solid ideas about which teachers at the school might be good mentors based on their area of expertise, personality, and observed desire and reputation for wanting to help students. I had actually approached Mr. Green and Mr. Linder and told them about my research and the need for mentors. They both seemed interested and I was excited that two of the participants' interests matched the areas that these teachers specialized in.

When I approached each prospective mentor, I described the student I was considering along with their interests and challenges and left it open for each teacher to commit to doing this. I was thankful that I found the five outstanding mentors that I did. As I reflected upon the semester, went over notes, interview data, and email updates from the mentors, I realized that significance of these relationships, although important for all participants, did not have the same value for all involved.

One important insight that I can accurately report, is that the most significant mentor relationships were ones where the mentor and student actually had a class together or as in the case of Coach Edmonds and Deon, when they participated in an extracurricular activity together,

during the course of the study. This was also the case for Adam and Mr. Green and Brian and Mr. Linder. As one may expect, this presented challenges as the mentors occasionally found themselves having to redirect participants' behavior in class, which was uncomfortable given the one-on-one time spent with each other outside of class. Mr. Green said, "I have no problem directing or reprimanding other students but the couple of occasions that Adam needed redirection, I was nervous and afraid it would mess up what we were doing during planning time." On the other hand, Mr. Green believed that their relationship kept things from escalating on a couple of occasions. He recalled a day when he had to redirect Adam and a group of friends and he had used a raised voice to allow himself to be heard above the commotion that the boys were causing. He said that Adam seemed to respond forcefully, almost out of habit, but caught himself before he responded. Mr. Green and I discussed some of these isolated incidents and encouraged him to discuss them with Adam. I gave him some specific ideas about how to approach him. Mr. Green said later that Adam was surprisingly receptive when addressed one on one and their relationship grew stronger and was close enough to delve into the very personal nature of the video that Adam eventually produced for his Type III.

Mr. Linder made similar observations and believed at first that things were great between Brian and him. They did not spend as much time together out of class except in the early weeks of the study as Brian tutored students in other classes when he was not in Chemistry with Mr. Linder. What Mr. Linder shared is that eventually Brian became, "too big for his boots" and became more social with his friends instead of maintaining his tutoring role that he had carried for much of the semester. In fact, in the post intervention interview, Mr. Linder expressed his frustration when asked if he felt any personal benefit from mentoring Brian. He said that, "This didn't do anything for me and I don't think it did anything for him either." I was surprised by

this, as I had received positive responses for most of the study. I learned later that Mr. Linder had turned in his resignation just before the conclusion of the study. He said that the school administration had been hard on him over some personnel and instructional issues so he resigned. I have to think that his personal frustration may have impacted his perspective on this experience.

I am further inclined to put Mr. Linder's critical observations in perspective after I conducted the post intervention interview with Brian. Brian only had positive things to say about Mr. Linder and the experience as a whole. When I asked him about his relationship with Mr. Linder he said it was great and commented, "We're cool you know, we got along great." When I asked what he learned from Mr. Linder from this experience he said, "I learned that I am a good teacher, sometimes I can explain things better than Mr. Linder."

Despite the negative situation with Mr. Linder resigning, I am inclined to say that this relationship had a lot of good moments and was certainly good for Brian especially considering his improvement on the BASC-2 Sense of Inadequacy score and declines in other domains as reported by his teachers.

The relationship between Coach Edmonds and Deon was already off to a good start as they had known each other for over a year through football. Even though Deon's final product was not as in-depth as he had originally planned due to his family's eviction and relocation; he still produced a solid presentation based on interviews with local coaches and athletes that documented many ideas for making high school sports safer and more productive.

The bond between Deon and Coach Edmonds grew stronger as Coach Edmonds became an important resource during this tough time. Coach Edmonds also was instrumental in helping Deon maintain passing grades in his classes and remain academically eligible for athletics next

semester. Coach Edmonds did much more for Deon than mentor a Type III investigation; he became a true ally in life and a friend. He really helped Deon through a terrible ordeal and helped him manage to finish an applied product. Deon expressed nothing but gratitude for Coach Edmonds when I interviewed him at the conclusion of the study. He gratefully reported, "I owe a lot to coach, he worked hard for me and stayed on me when I wanted to give up." Coach Edmonds confirmed in his own interview that this was a "win-win" situation.

The level of significance of the other two mentor participant relationships was not as clear to see. Tony and Ms. Martin collaborated in a more independent fashion and communicated through email with each other and with me as they laid the groundwork for the book club. Tony's shyness made him reluctant to seek her out during her planning period and he would not go visit her unless I took him there myself. I would have to encourage him to come with me. I would tell him, "This is the only way you can get the book club started." Once he was with her, he would stay, but Ms. Martin said he did not say much unless she initiated the discussion. She said, "I had to do most of the talking, but I could get him to tell me his main ideas."

As the study concluded, the book club was scheduled to start and the book lists and discussion topics had been planned by Tony and Ms. Martin. They had a tentative pool of 15 students who had signed up to attend the inaugural meeting after the holiday break. Given that Tony had Asperger's, it is not surprising that it was hard to pull out the influence and significance of a relationship from interview data. Diminished social functioning is a hallmark characteristic of autism. The best evidence I have that speaks to the success of this relationship is the fact that Tony stayed in school and made three A's and a B during the semester that the study took place despite the fact that his grandfather lay dying in a hospital from late October until the study concluded.

The extent of the relationship between Miranda and Ms. Clay was also difficult to interpret. They both reported that they got along and liked each other. Ms. Clay enjoyed facilitating this experience for Miranda and reported that Miranda was a capable animal handler and care giver. When asked what it was like working with Miranda, Ms. Clay said, "Miranda was a thrill to work with, it was great for me to work with a young lady with my same love of animals." Miranda seconded that notion and said, "I wish I could have Ms. Clay for one of my regular teachers next year." I can only speculate that given Miranda's acute difficulties at home, with a maternal figure, that she may be slow to open up to a new adult. The biggest obstacle in fully analyzing this relationship is due to the fact that Miranda was expelled from our school 10 weeks into the study. She was found to be in possession of marijuana at school and was placed at the alternative school. Before this occurred, she and Ms. Clay had completed many sessions with the child care profound special needs students from the school. Before she was expelled, Miranda was passing all classes and had not had any serious behavior problems during the semester.

I learned from our counseling department during the expulsion process that the situation in Miranda's home was continuing to be problematic and potentially abusive. The last I heard was that Miranda was potentially going to live in foster care. I am left to wonder how this all played out for her. She will be allowed to return to her original school when the next school year begins, and I eagerly await her arrival. In terms of situating the impact of the Type III study with Miranda, all I can say is the work had promise, but Miranda's challenges, for now, are clearly outside the influence of a school based intervention.

Affective Benefits

The data obtained from the BASC-2 revealed that each participant experienced positive benefits in social and emotional functioning. Although the results were not consistent in terms of

significance or magnitude across participants, it is possible to see that each participant had improvements in terms of at-risk and clinical significance in some area of behavioral or adaptive functioning. The following section will describe the highlights of the significant gains reported from the pre and post test BASC-2 results.

Deon's Self Report for Anxiety improved from 75 (clinically significant) to 67 (at-risk). His Self Report also showed an improvement on Hyperactivity, 87 to 78. Although the post test score remains in the clinically significant range, the reduction represents an improvement of over two standard deviations. On the Teacher Report, Deon rated improvements in Hyperactivity, 81 to 72; Conduct Problems, 74 (clinically significant) to 67 (at-risk); and Attention Problems, 71 (clinically significant) to 65 (at-risk).

Miranda' Self Report reported improvement in Attitude to School, 69 (at-risk) to 58 (normal); Locus of Control, 72 (clinically significant) to 64 (at-risk); Somatization, 69 (at-risk) to 58 (normal); Attention Problems, 71(clinically significant) to 67 (at-risk); Self-Esteem, 25 (clinically significant) to 31 (at-risk). The Teacher Rating for Miranda showed a gain in Leadership, 29 (clinically significant) to 35 (at-risk). Miranda's Parent Report showed improvements in Hyperactivity, 72 (clinically significant) to 67 (at-risk), and Social Skills 27 (clinically significant) to 33 (at-risk).

Adam showed improvement on the Self Report in Atypicality from 90 to 82 (Two Standard Deviations); Locus of Control, 87 to 73 (Two Standard Deviations); Sense of Inadequacy, 69 (at-risk) to 58 (normal); and Interpersonal Relations, 26 (clinically significant) to 32 (at-risk). The Teacher Report for Adam revealed improvements in Hyperactivity, 76 (clinically significant) to 68 (at-risk); Conduct Problems, 78 (clinically significant) to 66 (at-risk); Adaptability, 39 (at-risk) to 41 (normal).

Brian posted gains from the Self Report in Attitude to School, 78 (clinically significant) to 63 (at-risk); Social Stress, 62 (at-risk) to 55 (normal); Anxiey, 69 to 61 (Two Standard Deviations); Depression, 66 (at-risk) to 59 (normal); Sense of Inadequacy, 70 (clinically significant) to 58 (normal); Somatization, 73 (clinically significant) to 67 (at-risk); Attention Problems, 77 (clinically significant) to 69 (at-risk). Brian's Teacher Report showed an improvement in Conduct Problems, 73 (clinically significant) to 61 (at-risk); Atypicality, 65 (at-risk) to 59 (normal); and Adaptability, 37 (at-risk) to 40 (normal). The Parent Rating for Brian reported gains in Anxiety, 67 (at-risk) to 57 (normal); Depression, 62 (at-risk) to 59 (normal); Attention Problems, 73 (clinically significant) to 63 (at-risk); and Leadership, 37 (at-risk) to 42 (normal).

Tony's Self Report yielded gains in Social Stress, 69 to 62 (Two Standard Deviations), Depression, 64 (at-risk) to 47 (normal); Somatization 61 (at-risk) to 51 (normal); Attention Problems, 60 (at-risk) to 40 (normal); Interpersonal Relations, 10 to 29 (Three Standard Deviations). The Teacher Report for Tony showed improvements in Withdrawal, 78 (clinically significant) to 65 (at-risk); Social Skills, 27 (clinically significant) to 35 (at-risk); Leadership, 37 (at-risk) to 41 (normal); Functional Communication, 23 (clinically significant) to 32 (at-risk). On the Parent Report, Tony showed progress in Withdrawal, 91 to 73 (Three Standard Deviations); Adaptability, 26 (clinically significant) to 34 (at-risk); Social Skills, 23 (clinically significant) to 32 (at-risk).The score summaries for all five participants are presented in the following tables.

Table 4 - BASC-2 Participant Score Summary

Scales	Deon Pre/Post	Miranda Pre/Post	Adam Pre/Post	Brian Pre/Post	Tony Pre/Post
Self Rating					
Behavioral Symptoms					
Attitude to School	*63*/57	*69*/58	55/48	**78**/*63*	*63*/**70**
Attitude to Teachers	*67*/59	56/54	58/56	*67/65*	55/53
Sensation Seeking	*63*/65	56/*61*	*60/61*	*47*/47	33/37
Atypicality	56/56	43/45	**90/82**	**82/78**	53/53
Locus of Control	46/45	**72**/*64*	**87/73**	55/49	51/39
Social Stress	62/65	58/57	**88/80**	*62*/55	*69/62*
Anxiety	**75**/*67*	59/67	**70/70**	*69/61*	**70/70**
Depression	*61/63*	59/65	59/58	*66*/59	*64*/47
Sense of Inadequacy	*65*/58	*69*/58	51/45	**70**/58	*61*/51
Somatization	47/48	59/57	*69*/58	**73**/*67*	*60*/40
Attention Problems	*63*/65	**71**/*67*	56/56	**77**/*69*	41/50
Hyperactivity	**87/78**	*65/68*	**87/82**	*66/67*	48/*63*
Adaptive Scales					
Relations with Parents	50/45	**22/23**	**23/27**	*31/36*	*30*/**28**
Interpersonal Relations	45/43	51/43	**26**/*32*	49/51	**10/29**
Self-Esteem	42/45	**25**/*31*	45/51	*37/36*	45/45
Self-Reliance	55/50	*37*/42	53/55	55/54	*35/35*
Teacher Rating					
Behavioral Symptoms					
Hyperactivity	**81/72**	48/51	**76**/*68*	*68/62*	42/40
Aggression	58/56	48/53	*69/63*	*62*/59	43/44
Conduct Problems	**74**/*67*	53/51	**78**/*66*	**73**/*61*	43/45
Anxiety	*67/65*	39/43	*63/60*	*68/63*	49/42
Depression	*63/61*	45/49	*60/62*	*64/61*	52/47
Attention Problems	**71**/*65*	53/53	*67/65*	*68/67*	42/45
Learning Problems	58/56	51/50	46/51	*66/62*	41/44
Atypicality	**94/88**	45/45	59/*62*	*65*/59	46/46
Withdrawal	58/57	56/55	46/44	52/52	**78**/*65*
Adaptive Scales					
Adaptability	*39*/41	45/47	*39*/41	*37*/40	43/45
Social Skills	45/42	*32*/41	40/42	52/51	**27**/*35*
Leadership	49/53	**29**/*35*	*32/34*	47/46	*37*/41
Study Skills	*33*/42	*36*/40	*33/31*	*33/35*	54/54
Functional Communication	*38*/41	48/50	40/42	54/55	**23**/*32*

Scales	Deon Pre/Post	Miranda Pre/Post	Adam Pre/Post	Brian Pre/Post	Tony Pre/Post
Parent Rating					
Behavioral Symptoms					
Hyperactivity	*69*/**71**	**72**/*67*	54/56	58/56	*67/68*
Aggression	55/53	**81**/**83**	50/48	*63/65*	58/*61*
Conduct Problems	*62/61*	**73/75**	53/49	53/50	48/58
Anxiety	*67/68*	43/41	52/56	*67*/57	56/*62*
Depression	58/*61*	*67/65*	58/56	*62*/59	*60*/**72**
Somatization	49/48	**77/78**	57/55	59/59	*63/69*
Atypicality	52/52	47/47	45/46	57/55	*66/65*
Withdrawal	51/54	*62/64*	49/49	*69/65*	**91/73**
Attention Problems	*64/62*	*66/68*	42/44	**73**/*63*	*67*/**72**
Adaptive Scales					
Adaptability	47/48	*31/35*	52/49	40/43	**26**/*34*
Social Skills	50/49	**27**/*33*	54/54	43/44	**23**/*32*
Leadership	43/45	*34/35*	63/59	*37*/42	**23**/**28**
Activities of Daily Living	44/45	*38/35*	43/44	48/49	*33/37*
Functional Communication	48/46	41/43	64/62	53/55	*34/37*

Behavioral Symptoms: Bold=Clinically Significant (T Score 70 or above)
Italics=At-Risk (T Score 60-69)

Adaptive Scales: Bold=Clinically Significant (T Score 30 or below)
Italics=At-Risk (T Score 31-40)

In summation, the effects of this experience were positive for all and profound for some. During the course of this study, participants exhibited improved behavior relative to past semesters as well as better grades and attendance relative to recent terms. The post test results from the BASC-2 overall showed improvement although the level of statistical significance is likely negligible when taken as a whole. I want to highlight that the pre and post ratings on the BASC-2 were taken just four months apart. I am inclined to believe that a longer study would yield more significant results on a measure such as the BASC-2.

The overall results from the coded data and the themes presented above suggest that participation in Type III investigations can be a part of a solid intervention for high ability students with behavioral challenges. The next aspect of the study to be discussed involves the mentoring techniques that can be taken from this experience as being effective with this population.

The final research question posed by this study asked, "What specific pedagogical, instructional, or mentoring strategies enhance the experience of pursuing Type III investigations with high ability students with behavioral challenges?" What follows is a description of strategies and techniques that the mentor teachers from this study reported as being salient in working with participants in pursuing their Type III investigations.

Effective Mentoring Strategies

Collaboration

The mentors in this study had an important role to play. Each of these projects presented challenges and obstacles; some that were anticipated, some that were not. The first theme that emerged from the interview data from mentors and participants that proved essential in facilitating these projects was the importance of having a collaborative, rather than an instructional, relationship. All mentors stated in some form or fashion that they had to step back and allow themselves to be a peer from time to time. They had to let the participants come up with their own solutions to problems that arose as the projects progressed. Mr. Green shared that Adam only, "wanted my help if he hit a brick wall." He continued, "I had to control myself when

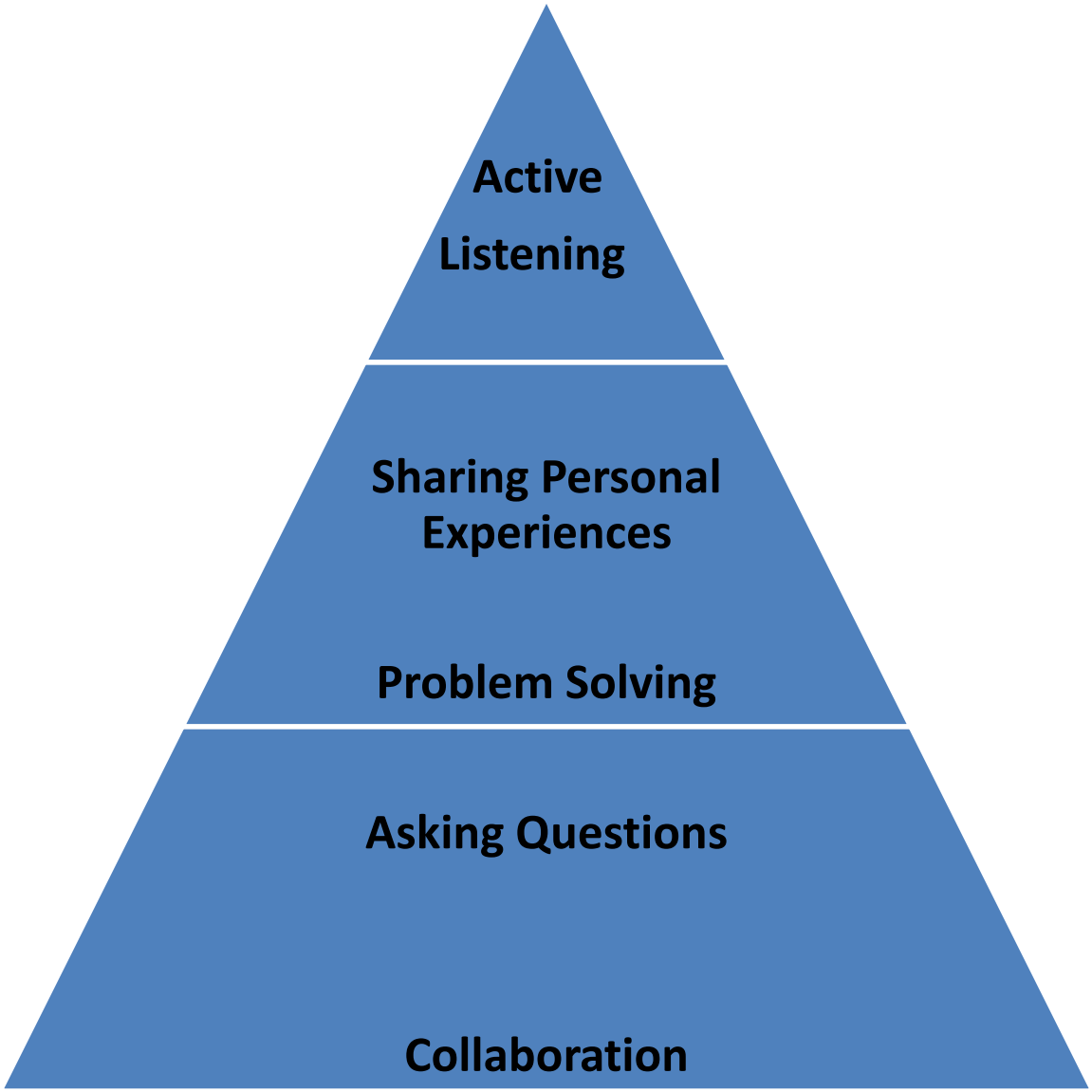

Figure 4 – Effective Mentoring Strategies

I wanted to edit things differently than he did." Mr. Linder stated that this collaborative spirit was very important when he and Brian were working together in the same class. He said, "Even if I heard Brian give inaccurate information I was careful not to correct him. I would ask him later if he thought he could have explained it differently, I let him correct himself."

Asking Questions

Mentors reported that when they asked the right questions of the participants, they were able to guide the student without being the driving force behind the solution. Coach Edmonds stated that when Deon was developing interview questions for the coaches, he was careful to phrase his feedback as a question. "I would ask Deon what he was looking for instead of telling him the question was no good," he said. This was critical to building confidence and independence in the participants' abilities to solve problems that arose.

Active Listening/Problem Solving

Another important action that all mentors reported as being important in facilitating the relationships with their participants was active listening. Each team had different issues to deal with during the course of the study but all mentors cited occasions where their student partner needed to "vent" about one thing or another. As much as they wanted to give advice at times, they learned that by listening and repeating what they heard without being judgmental, they were able to build trust and credibility that allowed them to progressively lend advice to a receptive participant as their relationships grew.

Coach Edmonds said this was a part of their routine each time they met. He said, "I would always give Deon some time to decompress and tell me what was on his mind before we started working on the project." He continued, "Deon needed this, and it helped me too." Mr. Green said that Adam would frequently "vent" about one of his teachers that he was having conflict with and stated, "Adam and his family and consumer science teacher did not get along and he was frequently angry after leaving her class." Mr. Green added, "When I let Adam get it out of his system, he would eventually be able to calm down and be productive." This method was most

important when being presented with "What would you do?" type problems. The mentors, each in their own way, found ways to help participants solve problems when they could, or point them in the right direction when appropriate.

Sharing Personal Experiences

The essence of a strong relationship is an open shared experience where trust and mutual understanding define interactions and motives between individuals. In this 16 week study, a significant amount of rapport and trust was developed between the mentors and students they worked with. Along with the strategies and methods mentioned thus far, one final relationship building technique that is commonly used is the art of using shared experiences as a way to build trust and confidence in others. The mentors that participated in this study each found opportunities for sharing examples and experiences from their own lives.

Mr. Linder shared with Brian that he had also experienced his own challenges in school and could that he could relate to Brian's frustrations. Mr. Linder told me about a story he shared with Brian saying, "I told Brian that I also was bored in school and frequently had problems similar to his." Mr. Linder said he made a point of letting Brian know that, "he knew what it was like to hate school before he decided on a career in engineering." Ms. Martin, who had recently experienced the passing of her own mother weeks before Tony's grandfather had his accident, said she was able to offer her perspective on tragedy and loss. Ms. Martin told Tony, "I know what you are going through and even though it hurts now it will get better with time." Coach Edmonds shared that he and Deon had a great deal in common and he routinely shared experiences from his life and his and Deon's bond grew stronger as a result. Coach Edmonds told me that, "I also grew up without a father figure and I talked about this at length with Deon." This happened differently for each team and some shared experiences were more revealing than

others. The mentors had to decide when and how much to share and this was undoubtedly different for each individual. The key was knowing that this level of sharing is vital to building the level of trust and rapport needed to successfully complete this kind of project.

Being engaged in a collaborative endeavor like a Type III investigation provides a unique relationship building and character development opportunity where the line between student and teacher sometimes becomes blurred as the situation necessitates it. The mentors for this study were very skillful and adept at walking this fine line and their devotion and caring was essential to the success of this study.

CHAPTER 6

DISCUSSION AND IMPLICATIONS

Summary of Findings

This research study revealed many insights into the school experiences of five high ability students with behavioral challenges from a single high school. The findings revealed the primary factors that led to underachievement for this population and the benefits of using Type III investigations to address their academic and behavioral difficulties. The participants for this study were chosen for demonstrating high ability by either being previously served in a gifted program or through test scores on the Iowa Test of Basic Skills, Criterion Reference Competency Tests and or End of Course Tests. Behavioral challenges were documented through a review of office referral data. Each participant chosen for this study had received at least three or more behavioral referrals for disrespectful, disobedient, or defiant behavior in the last year.

The academic underachievement of these participants was found to result from an interaction of several factors including: lack of interest in curriculum, boredom, lack of productivity in class leading to conflict with teachers, poor social skills, anger management issues, family conflict, family adversity, and low self-esteem. BASC-2 reports also indicated that participants at the onset of the study had at risk or clinically significant scores for hyperactivity, depression, anxiety, sense of inadequacy, attitude to school, locus of control, and attitude to teachers.

The social and behavioral backgrounds of this group were characterized by poor interactions with teachers and adults that manifested in historical patterns of office referrals,

which reflected a long standing trend of less-than-optimal school experiences. When the study began and pre-investigation interviews were conducted, there was a consensus among these students that they believed they were not good students and never would be. It also appeared that this feeling also characterized their overall identity in general.

The process of completing the Type III investigations with the collaboration of selected mentor teachers was challenging but rewarding. Three of the participants experienced serious life changing events during this process including: eviction, death of a parent figure, and expulsion from school. Despite these daunting situations, positive gains in academic, social, and behavioral functioning were made through the creation of Type III products and services. Data from student interviews, mentor interviews, reports from teachers, as well as BASC-2 Self, Parent, and Teacher reports reveal that improvements were shown in academic achievement, behavior, and on several of the measures of affective functioning. Positive and encouraging relationships were established with mentor teachers whose influence was pivotal in this study's success.

Discussion

Ultimately, the participants in this study demonstrated an impressive work ethic and were able to balance the demands and expectations of the Type III investigation with the demands of their regularly scheduled classes. Despite the occasional challenges and conflict that can result in implementing an endeavor of this nature, the experience proved to be beneficial. Participants, by and large, enjoyed the relationships and collaboration with their mentor teachers. They all enjoyed working in an applied area of interest where they felt that they were making a real contribution to society.

Findings Consistent with Extant Research

Many of this study's findings are consistent with, and provide further support for, current understandings of high ability students who exhibit challenging behavior in school. In terms of the potential positive impact of conducting Type III investigations, the findings of this study aligned well with prior research (Hébert & Olenchak, 2000; Reis & McCoach, 2000, Renzulli & Reis, 2008; Hébert, 2011). Furthermore, the findings of this study were consistent with prior studies that looked at the effectiveness of Type IIIs in reversing underachievement in gifted students (Baum et al., 1994; Baum, Renzulli & Hébert, 1995; Renzulli, Baum, Hebert, & McCluskey, 1999; Hébert, 2011). The participants in this study experienced global improvement in academic, behavioral, and social functioning during the process of their Type III investigations.

The self-selected nature of these investigations and the active engagement required to complete them was found to be a significant benefit for participants in reversing underachievement patterns and behavioral challenges. Another finding consistent with past research is the signifigance of family influence and conflict as a factor contributing to underachievement. The benefits of the mentor relationship, which has been demonstrated in previous research, were also found to be relevant for the participants in this study.

The findings of this study reinforce the existing literature regarding Twice Exceptional (2E) students. The fundamental components of this study that can be attributed to its success are all grounded in current programming and interventions for 2E students which include strategies that: nurture the students' strengths and weaknesses, foster their social/emotional development, enhance their capacity to cope with mixed abilities, identify gaps and provide explicit instruction, and support the development of compensatory strategies (Baum & Owen, 2004). The

participants and mentors in this Type III intervention utilized all of these components and did so in a way that was suited to address individual needs (Renzulli & Reis, 2008).

Another aspect in which the experience of this study is consistent with previous research is the positive influence of mentoring (Hébert & Olenchak, 2000; Rhodes, Grossman & Resch, 2000; Smink & Schargel, 2004; Hébert, 2011). As in earlier studies, the mentoring relationships and collaboration that resulted from this study were crucial to the participants' success in the completion of their projects and the positive academic, emotional, and behavioral gains that were observed.

Creative productivity, which is a by-product of the Type III experience, was identified by Baum, Renzulli, and Hébert (1994), as an important element that can provide a positive outlet for gifted learners who had become disengaged from school just as the participants in this study had. Two of the final products developed for this study were discernible products, one being a video, the other being a presentation and informational pamphlet. The other three projects were service-oriented ,although their successful implementation depended on a constant creative problem solving process that previous research has found to be equally important.

The benefits of providing a service to others were a central focus of each participant project in this study. The significance of this service learning aspect has also been reported by Shumer, 1990; Duckenfield, 1992; Billig, 2000; Terry, 2003; and Terry & Bohnenberger, 2003. As in previous studies involving service learning, participants in this study developed relationships with facilitators, mentors, and other participants, gained autonomy and competence, and felt empowered by making a difference in the lives of others.

Other consistent findings with previous research related to the identification of the causes and factors of underachievement and behavioral challenges of this study's participant population.

One common theme identified in this study from participant interviews was that they all reported having a lack of interest in school and felt disconnected from the school culture and environment. The sentiment that students with behavioral challenges frequently experience an overall disconnect with school which underlies the prevailing attitudes and social interactions that define a maladaptive pattern of affective functioning has been confirmed by others (Reis & McCoach, 2002).

The power of a negative self-fulfilling prophecy was very salient for the participants in this study. This concept has been recognized as a relevant theme in research literature. Students with chronic behavior problems have been reported to be more frequently judged by others to be disruptive, insolent, disobedient, and disrespectful (Gallagher, 1997; Daniels, 2002). These behavioral and social difficulties have been shown to directly affect students' academic development, their peer and social interactions, and their self-esteem. When compared to peers without such a label or a reputation for being "bad," identified students tend to be less engaged, more likely to display off-task behaviors, more impulsive, uninvolved and inattentive (Swaggart, 1998; Shores, Gunter & Jacks, 1993; Daniels, 2002). This reality was all too common in the backgrounds of this study's participants.

This study intended to be a departure from traditional behavior strategies that are common in schools today. The efficacy of positive consequences for managing student behavior has been widely demonstrated (Gottfredson, Gottfredson, & Hybl, 1993; C. Nelson & Rutherford, 1987). What was learned from the data from this study is that these students worked very hard to control their behavior in the presence of a positive reinforcer, such as working on a self-selected topic with a friendly and supportive mentor teacher. This relates to a lack of effectiveness that has been demonstrated with punitive measures (Gable, Hendrickson, Young,

Shores, & Stowitschek, 1983; Heller & White, 1975; Shores et al., 1993; Gallagher, 1997; Knitzer, Steinberg, & Fleisch, 1990). Prior to this study, these participants had not been exposed to such an intervention that incorporated so many features that represent a departure from punishment. Therefore, previous methods had no impact on the underlying causes of the challenging behavior. This has also been reported by previous research (Gallagher, 1997; Skiba & Peterson, 2000; Kemp 2006).

Novel Contributions to High Ability and Challenging Behavior Research

This research is the first study of its' kind that focused on this particular population of students (Reid & McGuire, 1995; Reis & McCoach, 2002). The use of Type III investigations has been well documented with gifted students but their effectiveness in working with students outside of gifted education has been scant (Reis & Neu, 1994; Reid & McGuire, 1995; Horner & Carr, 1997; Siegle & McCoach, 2005). The positive benefits of this study as they relate to high ability students with behavioral challenges can be seen in improved academic and behavioral performance during the course of the Type III intervention. The results of the BASC-2 indicated that participants also experienced improved social and emotional functioning that may provide benefits beyond this study. This study also reported several important mentoring strategies that were influential in improved participant performance. These mentoring strategies could easily be utilized by classroom teachers and other service providers.

Another contribution of this study is that its' results provide reason to challenge current educators' perceptions about high ability students with challenging behavior. This study not only provides reasons to question current gifted identification criteria, but gifted education delivery models in general. If the students from this study had been exposed to this type of intervention earlier in their lives, one would have to wonder how that may have impacted affective

functioning and school performance. Prior to this study being conducted, it is likely that those who knew these participants in the school setting would have had their doubts about their ability to complete such a process while maintaining better grades and behavior simultaneously, as was demonstrated in this study.

Implications for High Ability Students with Behavioral Challenges

This study presented findings of a positive nature regarding the use of Type III investigations to address academic underachievement, behavioral challenges, and potential high school drop-out issues. The most important implication for these students to recognize and understand was that there are many factors, some of which are out of their control, that contributed to their difficulties in school. They should not have to shoulder the burden for all of the underlying causes of their predicament. They can be empowered to move forward with the knowledge provided by these findings. If the school curriculum is not meeting their needs, they can find ways to build upon their strengths. They can find ways to help others. They need to identify adults who could be helpful role models and mentors and work to develop rapport by taking a class or participating in an extra-curricular activity with that individual.

To the extent that their problems are related to factors outside of school, they can recognize those they can influence and those they cannot and move forward knowing that they have the ability to define their own future by impacting the aspects of their lives that they can control.

Another implication of this study relates to gifted program retention and how behavior issues and student motivation interact and impact placement in gifted education or general education classes. Three of the participants in this study had been previously served in gifted programs but had decided to opt out of gifted services. If gifted students who exhibit challenging

behavior could be effectively retained in gifted programs, it is possible that underachievement patterns could be prevented from developing. Two of the participants were not previously identified as gifted due to behavioral challenges and atypicality. The gifted identification paradigm needs to be shifted to align to a philosophy that would include all gifted and talented students regardless of their behavioral manifestations.

Implications for Schools

Most teachers have worked with students similar to the participants selected for this study. The lessons learned from the findings will hopefully provide some guidance and insight for addressing these unique challenges in the future. What can be useful for teachers is that in a 16 week span of time, an intervention of this nature made a positive impact on many levels of school functioning. This strength-oriented interest-based approach did, in 16 weeks, what years of punishment and standardized curriculum had failed to address.

High ability students with underlying emotional and behavioral problems have the same abilities and need for academic rigor as do traditional gifted students. Likewise, they need the personal attention and freedom that is usually afforded special education students who have challenging affective deficits. In terms of providing this type of specialized instruction, this study demonstrates how counseling and behavior management strategies that are traditionally used with EBD students or students with conduct disorders can also be effective and are necessary for high ability students as well. It cannot be assumed that just because a student has high academic ability that they are aware of their own behavior and emotional needs to the extent needed to function adaptively in all circumstances.

Likewise, this study can serve as a model for use with other student populations who exhibit challenging behavior. Special education teachers could easily introduce elements of the

Type III experience to facilitate better peer and teacher relationships, accommodate individual interests and abilities, as well as to model and reward positive behavior and classroom performance.

Secondary gifted education teachers and coordinators can easily take advantage of what was learned from this study by making self-selected applied products a more common fixture in advanced content classes. This study can be a starting place for teachers and administrators to look at the problem of underachievement of this population of students through a different lens.

This study can also serve to inform practitioners and teachers in the use of the BASC-2 as an outcome measure for interventions such as the Type III. The strength that a clinically-normed instrument like the BASC-2 brings to a study of this kind can be profound. This is especially true when its data is viewed within conjunction with qualitative data such as was collected in this study.

Another important implication from this study is grounded in the relationships that were formed between the participants and the mentor teachers. These relationships were not only beneficial for the students; they benefited the teachers as well. All five mentors shared that this experience either furthered their understanding and empathy for students in this population, or expanded it in a manner that they feel will make them more effective in the future in working with all students.

Recommendations for Future Research

The results of this study suggest several different directions for future research. The first avenue that deserves consideration would be to replicate this type of study over a longer period of time. Along that path, it would also be beneficial to follow up with participants after the study is concluded to see if the positive changes remained constant. It is not surprising from analyzing

the data and looking at the significance of the supportive collaborative network of individuals that accompanied this study, that some decline and regression would be present when the study concluded.

Ideally, this study could take place over an entire 36-week school year as opposed to a semester. A longer duration would certainly reap rewards and increase the gains observed in the present study. Relationships with mentor teachers would have more time to develop and grow. It would be interesting to see what impact having a sustained yearlong supportive framework like this would have over the course of an entire school year.

Another direction for research would be to implement this arrangement as a more permanent part of the curriculum for all students. Special education students who exhibit similar affective traits may benefit in a similar fashion to the opportunities and support offered by a Type III. It would be interesting to see if an intervention like this, used as a regular part of the curriculum, could prevent some of the curricular and school-based factors of underachievement and behavioral challenges before they start. On that note, it would be worth investigating to offer entire academic content courses in this format for students who have affective profiles similar to the ones included in this study.

The replication of this study in other schools and geographic regions would also be beneficial in determining if there are other causal factors and strategies that were not identified in this research location but may have relevance in other environments. It would be very informative to observe the results of this kind of experience in an urban or rural setting. Another avenue for replication would be working with culturally diverse or gender specific populations. It may also prove beneficial to implement the Type III investigation with the same population as this study but at a middle school or elementary school.

Conclusion

This experience was successful due to a multitude of individuals and factors. The participants, mentors, parents, and cooperating teachers all contributed to the success of this study. Likewise, the school's administration and community was receptive and supportive of these efforts and the positive outcomes of this study could not have been reached without all of these collaborative efforts.

The participants thrived on being actively engaged in an area of interest that contributed to academic and behavioral benefits during the course of the study. Mentor teachers assisted students and benefited professionally and personally as a result of their participation in the Type III process. Teacher and parent attitudes towards these students showed a renewed sense of hope and encouragement as they began to view the five participants in a different light. The contributions put forth by the completion and participation of the applied projects benefited many people inside and outside of the halls of theschool and the walls of the classroom. I am eternally grateful that I was a part of this wonderful experience and cannot wait to develop and promote this continued cooperation and involvement in the future.

This study provides a starting point for what could be a promising approach for meeting the needs of high ability students with behavioral challenges. Although the findings of this study are limited to this particular participant population and school, it is well worth future consideration for replication in other locations and demographic groups. Besides being an intervention for acute situations, there may also be a preventative and protective factor characteristic to this approach that may show the potential of intervening and mediating causal factors of underachievement before they escalate into serious maladaptive behavior. I believe, as I have witnessed the positive effects of this study first hand, that this approach shows tremendous

promise for not only meeting the needs of this specialized population but that it can serve as an example of how to improve the educational environment and cooperative framework in all school settings. I am proud to have been a part of something that not only helped to improve peoples' lives but also has the power to change others' minds about how they view children who may not always behave the way society wants them to.

REFERENCES

Adderholt-Elliott, M. (1989). Perfectionism and underachievement. Gifted Child Quarterly, 12, 19-21.

Allinder, R. M., Bolling, R. M., Oats, R. G., & Gagnon, W. A. (2000). Effects of teacher self-monitoring on implementation of curriculum-based measurement and mathematical computation achievement on students with disabilities. Remedial and Special Education, 21, 219-226.

Armendariz, F., & Umbreit, J. (1999). Using active responding to reduce disruptive behavior in a general education classroom. Journal of Positive Behavior Interventions, 1, 152-158.

Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.

Bandura, A. (1989). Human agency in social cognitive theory. American Psychologist, 44, 1175-1184.

Barbetta, P. M., & Howard, W.L. (1993). Effects of active student response during error correction on the acquisition and maintenance of geography facts by elementary students with learning disabilities. Journal of Behavior Education, 3, 217-233.

Barrish, H. H., Saunders, M., & Wolf, M. M. (1969) Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. Journal of Applied Behavioral Analysis, 2(2): 119–124.

Baum, S. M. (1985). Learning disabled students with superior cognitive abilities: A validation study of descriptive behaviors. (Unpublished doctoral dissertation). University of Connecticut, Storrs, CT.

Baum, S. M. (1988). An enrichment program of gifted learning disabled students. Gifted Child Quarterly, 32, 226-230.

Baum, S. M. (1994). Meeting the needs of gifted/learning disabled students: How far have we come? Journal of Secondary Gifted Education, 5, 6-16.

Baum, S. M., Emerick, L. J., Herman, G. N., & Dixon, J. (1989). Identification, programs and enrichment strategies for gifted learning disabled youth. Roeper Review, 12, 48-53.

Baum, S. M., & Owen, S. V. (1988). High ability learning disabled students: How are they different? Gifted Child Quarterly, 32, 321-326.

Baum, S. M., Owen, S. V., & Dixon, J. (1991). To be gifted and learning disabled: From identification to practical intervention strategies. Mansfield Center, CT:

Baum, S. M., Renzulli, J. S., & Hebert, T. P. (1995). The prism metaphor: A new paradigm for reversing underachievement. (Collaborative Research Study RS95310). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.

Berg, B. L. (2009). Qualitative research methods for social sciences (7th ed.). Boston, MA: Allyn & Bacon

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497–529.

Bianco, M. (2005). The effects of disability labels on special education and general education teachers' referrals for gifted programs. Learning Disability Quarterly, 28, 285-293.

Borland, James. (2004). Issues and practices in the identification and education of gifted students from under-represented groups. New York, NY: The National Research Center on the Gifted and Talented.

Bowditch, C. (1993). Getting rid of troublemakers: High school disciplinary procedures and the production of drop outs. Social Problems, 40, 493-507.

Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. New York: Basic Books.

Bowlby, J. (1973). *Attachment and loss: Vol. 2. Separation anxiety and anger*. New York: Basic Books.

Brantlinger, E. (1991). Social class distinctions in adolescents' reports of problems and punishment in school. Behavioral Disorders, 17, 36-46.

Butler-Por, N. (1987). Underachievers in school: Issues and intervention. Chichester, England: Wiley.

Carter, J. F., (1993). Self-management: Educator's ultimate goal. Teaching Exceptional Children, 25(3), 28-32.

Carnine, D. W. (1976). Effects of two teacher-presentation rates on off-task behavior, answering correctly, and participation. Journal of Applied Behavior Analysis, 9, 199-206.

Charmaz, K. (2006). Constructing Grounded Theory: A practical guide through qualitative analysis. Thousand Oaks, CA: Sage Publications.

Cook, B. G., & Schirmer, B. R. (2003). What is special about special education: An overview and analysis of the topical issue. Journal of Special Education, 37(3), 200-205.

Cook, B. G., Landrum, T. J., Tankersley, M., & Kauffman, J. M. (2003). Bringing research to bear on practice: Effecting evidence based instruction for students with emotional or behavioral disorders. Education and Treatment of Children, 26(4) 345-361.

Cook, C. R., Gresham, F. M., Kern, L., Barreras, R. B., Thornton, S., & Crews, D. S. (2008). Social skills training for secondary students with emotional and/or behavioral disorders: A review and analysis of the meta-analytic literature. Behavioral Disorders, 16, 131-144.

Crotty, M. (1998). The foundations of social research: Meaning and perspective in the research process. Thousand Oaks, CA: Sage Publications

Deno, S. L. (1998). Academic progress as incompatible behavior: Curriculum-based measurement (CBM) as intervention. Beyond Behavior, 9(3), 12-17.

Davies, C. A. (2008). Reflexive ethnography (2nd ed.). New York, NY: Routledge

Davis, C.R., & Bull, K.S. (1988). Emotionally disturbed, gifted/talented students in rural schools. Rural Special Education Quarterly, 8, 15-22.

Dewey, J. (1944). Democracy and education. New York, NY: The Free Press. (Original work published 1916).

Dishion, T. J., & Dodge, K. A. (2005). Peer contagion in interventions for children and adolescents: Moving towards an understanding of the ecology and dynamics of change. Journal of Abnormal Child Psychology, 33, 395-400.

Dowdall, C. B., & Colangelo, N. (1982). Underachieving gifted students: Review and implications. Gifted Child Quarterly, 26, 179–184.

Duckenfield, M. (1992). Service Learning: Meeting the needs of youth at risk. Clemson, SC: National Dropout Prevention Center.

Ekstrom, R. B., Goertz, M. E., Pollack, J. M., & Rock, D. A. (1986). Who drops out of high school and why? Findings from a national study. Teachers College Record, 87, 357-73.

Elam, S.M., Rose, L.C., & Gallup, A.M. (1966). The 28th annual Phi Delta Kappa/Gallup Poll of the public's attitudes toward public schools. Phi Delta Kappan, edition number?, 41-59.

Emmer, E. T. (1994). Towards an understanding of primacy of classroom management and discipline. Teaching Education, 61(1), 65-69.

Emerick, L.J. (1992). Academic underachievement among the gifted: Students' perceptions of factors that re-verse the pattern. Gifted Child Quarterly, 24, 51–55.

Frasier, M. M. (1986). Frasier Talent Assessment Profile (F-TAP): A multiple criteria model for the identification and education of gifted students. Athens, GA: The University of Georgia, The Torrance Center for Creative Studies.

Frasier, M. M., Garcia, J. H., & Passow, A. H. (1995). A review of assessment issues in gifted education and their implications for identifying gifted minority students (RM95204). Storrs, CT: The National Research Center on the Gifted and Talented, University of Connecticut.

Fromm, E. (1956). *The art of loving*. New York: Harper & Brothers.

Gable, R. A., & Hendrickson, J. M., (2000). Strategies for maintaining positive behavior stemming from functional behavioral assessment in schools. Education and Treatment of Children, 23, 286-297.

Gallagher, P.A. (1997). Promoting dignity: Taking the destructive D's out of behavior disorders. Focus on Exceptional Children, 29, 1-19.

Gallagher, S. (1992). Hermeneutics and education. New York, NY: State University Press.

Gallegos, A. (1998). School expulsions, suspensions, and dropouts: Understanding the issues. Hot Topics Series. Bloomington, IN: Phi Delta Kappa Center for Evaluation, Development, and Research.

Gerring, J. (2007). Case study research: Principles and practices. New York, NY: Cambridge University Press.

Gersten, R., Vaughn, S., Deshler, D., & Schiller, E., (1997). What we know about using research findings: Implications for improving special education practice. Journal of Learning Disabilities, 30, 466-476.

Goetz, J. P., & LeCompte, M. D. (1984). Ethnography and qualitative design in educational research. New York, NY: Academic Press.

Good, T. L. (1970). Which pupils do teachers call on? The Elementary School Journal, 70, 190-198.

Goodenow, C. (1993). The psychological sense of school membership among adolescents: Scale development and educational correlates. *Psychology in the Schools*, 30, 79–90.

Gottfredson, D. C., Gottfredson, G. D., & Hybl, L. G. (1993). Managing adolescent behavior: A multiyear, multi-school study. American Educational Research Journal, 30, 79-215.

Grantham, T.C., & Ford, D.Y. (2007). Continuing the search for equity and excellence: An overview of Frasier's talent assessment profile (F-TAP). Gifted Education Press Quarterly, 21(2), 1-3.

Greenwood, C. R. (2001). Science and students with learning and behavioral problems. Behavior Disorders, 27, 37-52.

Gresham, F. M., Van, M. B., & Cook, C. R. (2006). Social skills training for teaching replacement behaviors: Remediating acquisition deficits in at-risk students. Behavioral Disorders, 31, 363-377.

Gresham, F. M., Cook, C. R., Crews, S. D., & Kern, L. (2004). Social skills training for children and youth with emotional and behavioral disorders: Validity considerations and future directions. Behavioral Disorders, 30, 32-46.

Glaser, B.G., & Strauss, A. L. (1967). The discovery of grounded theory: Strategies for qualitative research. New York, NY: Academic Press.

Gunter, P. L., Denny, R. K., Jack, S. L., Shores, R. E., & Nelson, C. M. (1993). Aversive stimuli in academic interactions between students with serious emotional disturbance and their teachers. Behavioral Disorders,1, 2658-274.

Hale, R. L., & Saxe, J. E. (1983). Profile Analysis of the Wechsler Intelligence Scale for Children-Revised. Journal of Psychoeducational Assessment, 1(2), 155-162

Hallahan, D.P., & Kauffmann, J.M. (1991). Exceptional children: Introduction to special education (5th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hallahan, D.P., & Kauffmann, J.M. (2011). Exceptional learners: Introduction to special education (11th ed.). Englewood Cliffs, NJ: Prentice Hall.

Hagborg, W.J. (1998). An investigation of a brief measure of school membership. *Adolescence, 33(130),* 461-468.

Hébert, T. P. (2011). Understanding the social and emotional lives of gifted students. Waco, TX: Prufrock Press.

Hébert, T.P.; Olenchak, R. F. (2000) Mentors for Gifted Underachieving Males: Developing Potential and Realizing Promise. Gifted Child Quarterly, 44, 196-208.

Henderson, A. T., & Mapp, K. L. (2002). A new wave of evidence: The impact of school, family, and community connections on student achievement. Annual synthesis. National center for family and community connections with schools, Southwest educational development laboratory, Austin, TX.

Horner, R. H., & Carr, F. G. (1997). Behavioral support for students with severe disabilities: Functional assessment and comprehensive intervention. Journal of Special Education, 31, 84-104.

Horney, K. (1945). *Our inner conflicts: A constructive theory of neurosis*. New York: Norton.

Jenkins, P. H. (1997). School delinquency and the school bond. Journal of Research in Crime and Delinquency, 34, 337-367.

Kauffman, J. M. (1989). Characteristics of children's behavior disorders. (4th ed.). Columbus, OH: Merrill.

Kauffman, J. M. (1993). Characteristics of emotional and behavioral disorders of children and youth. (5th ed.). New York, NY: Macmillan Publishing.

Kauffman, J. M. (2001). Characteristics of children's behavior disorders. (7th ed.).Columbus, OH: Merrill.

Kemp, S.E. (2006). Drop out policies and trends for students with and without disabilities. Adolescence, 41(162), 235-250

King-Sears, M. E. (1997). Best academic practices for inclusive classrooms. Focus on Exceptional Children, 29, 1-22.

Kirby, D. (2002). Effective approaches to reducing adolescent unprotected sex, pregnancy, and childbearing. The Journal of Sex Research, 39(1), 51-57.

Klingner, J.K. (2003). Barriers and facilitators in scaling up research-based practices. Exceptional Children, 65(4), 411-429

Knitzer, J., Steinberg, Z., & Fliesch, B. (1990). At the school house door: An examination of programs and policies for children with behavioral and emotional disorders. New York, NY: Bank Street College.

Libbey, H.P. (2004). Measuring Student Relationships to School: Attachment, Bonding, Connectedness, and Engagement. *Journal of School Health*, *74(7)* 274-283.

Lincoln, Y. S., & Guba, E. G.. (1985). Naturalistic inquiry. Newbury Park, CA: Sage Publications.

Maslow, A. H. (1968). *Toward a psychology of being*. New York: Van Nostrand.

McDermott, P. A., & Glutting, J. J. (1997). Ontology, structure, and diagnostic benefits of a normative subtest taxonomy from the WISC-III standardization sample. Contemporary intellectual assessment: Theories, tests, and issues., (pp. 349-372). New York, NY, US: Guilford Press, xvi, 598 pp.

McDougall, D. (1998). Research on self-management techniques used by students with disabilities in general education settings: A descriptive review. Remedial and Special Education, 19, 310-320.

McFall, R. (1982). A Review and reformulation of the concept of social skills. Behavioral Assessment, 4, 1-33.

Meadows, N. B., Neel, R. S., Scott, C. M., & Parker, G. (1994). Academic performance, social competence, and mainstream accommodations : A look at mainstreamed and non mainstreamed students with serious behavioral disorders. Behavioral Disorders, 1, 1709-180.

Midgley, C., Feldlaufer, H., & Eccles, J. S. (1989). Change in teacher efficacy and student self- and task-related beliefs in mathematics during the transition to junior high school. *Journal of Educational Psychology*, 81, 247–258.

Miller, A. D., Hall, M. A., & Howard, W. L. (1995). Effects of sequential 1-minute time trials with and without inter-trial feedback and self-correction on general and special education students‘ fluency with math facts. Journal of Behavior Education, 5, 319-345.

Moon, S. M. (1991). Case study research in gifted education. In N. Buchanan & J. F. Feldhusen (Eds.) Conducting Research and Evaluation in Gifted Education (pp.157-178). New York, NY: Teachers College Press.

Morrison, W. F. (2001). Emotional/behavioral disabilities and gifted and talented behaviors: Paradoxical or semantic differences in characteristics? Psychology in the Schools, 38(5), 425.

Myles, B., & Simpson, R. (2001). Understanding the hidden curriculum: An essential social skill for children and youth with Asperger syndrome. Intervention in School and Clinic, 36, 279-286.

National Commission on Excellence in Education. (1983). A nation at risk: The imperative for educational reform. Washington, DC: U.S. Government Printing Office.

Nelson, J. R. (1996). Designing schools to meet the needs of students who exhibit disruptive behavior. Journal of Emotional and Behavioral Disorders, 4(3), 147-161.

Noddings, N. (2007). When school reform goes wrong. New York, NY: Teachers College Press.

Noguera, P. A. (1995). Preventing and producing violence: A critical analysis of responses to school violence. Harvard Educational Review, 65, 189-212.

Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70, 323–367.

Patterson, G. R. (1992). Developmental changes in antisocial behavior. In R. D. Peters, R. J. McMahon, & V. L. Quinsey (Eds.), Aggression and violence throughout the life span (p.52-82). Newbury Park, CA: Sage.

Patton, M.Q. (2002). Qualitative research and evaluation methods (3rd Ed.) Thousand Oaks, CA: Sage

Phelan, W. (1987). Obstacles to high school graduation: The real dropout problem. Journal of Education Equity and Leadership, 7, 223-234.

Ramsey, E., Walker, H. M., Shinn, M., & O'Neill, R. E. (1989). Parent management practices and school adjustment. School Psychology Review, 18, 513-525.

Redding, R.E. (1990). Learning preferences and skill patterns among underachieving gifted adolescents. Gifted Child Quarterly, 34, 72–75.

Reid, B. D., & McGuire, M. D. (1995). Square pegs in round holes—these kids don't fit: High ability students with behavioral problems. (Collaborative Research Study RDBM9512). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.

Reis, S. M. (1981). An analysis of the productivity of gifted students participating in programs using the revolving door identification model. (Unpublished doctoral dissertation) University of Connecticut, Storrs, CT.

Reis, S.M., & McCoach, D.B. (2000). The underachievement of gifted students: What do we know and where do we go? Gifted Child Quarterly, 44(3),152-170.

Reis, S. M., & McCoach, B. D. (2002). Underachievement in gifted and talented students with special needs. Exceptionality, 10(2), 113-125.

Reis, S. M., & Neu, T. W. (1994). Factors involved in the academic success of high ability university students with learning disabilities. Journal of Secondary Gifted Education, 5, 60-75.

Reis, S. M., Westberg, K. L., Kuilkowich, J., Caillard, F., Hébert, T., Plucker, . . . Smist, J. M. (1993). Why not let high ability students start school in January? The curriculum compacting study (Research Monograph No. 93106). Storrs, CT: University of Connecticut, The National Research Center on the Gifted and Talented.

Renzulli, J. S. (1977). The enrichment triad model: A guide for developing defensible programs for the gifted. Mansfield Center, CT: Creative Learning Press.

Renzulli, J. S., & Reis, S. M. (1985). The schoolwide enrichment model: A comprehensive plan for educational excellence. Mansfield Center, CT: Creative Learning Press.

Renzulli, J. S., & Reis, S. M. (2008). Enriching the curriculum for all students (2nd ed.). Thousand Oaks, CA: Corwin Press.

Reynolds, C. R., & Kamphaus, R. W. (2004). Behavior Assessment System for Children–Second Edition (BASC-2). Circle Pines, MN: AGS.

Rhodes, J. E., Grossman, J. B., & Resch, N. L. (2000). Agents of change: Pathways through which mentoring relationships influence adolescents' academic adjustment. Child Development, 71(6) 1662-1671.

Rimm, S. B. (1986). Underachievement syndrome: Causes and cures. Watertown, WI: Apple Publishing.

Rimm, S. B. (1997). Underachievement syndrome: A national epidemic. In N. Colangelo & G. A. Davis (Eds.), Handbook of gifted education (2nd ed., pp. 416–435). Boston, MA: Allyn & Bacon.

Robinson, S. (1999). Meeting the needs of students who are gifted and have learning disabilities. Intervention in School and Clinic, 34(4), 195-204.

Rodkin, P. C. (2004). Peer ecologies of aggression and bullying. In D. L. Esplelage & S. M. Swearer (Eds.), Bullying in American schools: A social ecological perspective on prevention and intervention (pp. 87-106). Mahwah, NJ: Lawrence Erlbaum.

Ruhl, K. L., & Berlinghoff, D. H. (1992). Research on improving behaviorally disordered students' academic performance: A review of the literature. Behavioral Disorders, 17(3) 78-90

Ryan, G. W., & Bernard, H. R. (2000). Data management and analysis methods. In N.K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (2nd ed., pp. 769-802). Thousand Oaks, CA: Sage Publications.

Sainato, D. M., Strain, P S., & Lyon, S. R. (1987). Increasing academic responding of handicapped preschool children during group instruction. Journal of the Division of Early Childhood, 12, 23-30.

Shumer, R. (1990). Community-based learning: An evaluation of a drop out prevention program. Report submitted to the City of Los Angeles Community Development Department. Field Studies Development, UCLA.

Schumm, J. S., & Vaughn, S. (1991). Making adaptations for mainstreamed students: General classroom teachers' perspectives. Remedial and Special Education, 12, 18-27.

Schumm, J. S. & Vaughn, S. (1995). Getting ready for inclusion: Is the stage set? Learning Disabilities Research and Practice, 10, 169-179.

Shores, R.E., Gunter, P. L., & Jack, S. L. (1993). Classroom management strategies: Are they setting events for coercion? Behavioral Disorders, 18, 92-102.

Siegle, D., & McCoach, D. B. (2001). Promoting a positive achievement attitude with gifted and talented students. The social and emotional development of gifted children: What do we know? Waco, TX: Prufrock Press.

Siegle, D., & McCoach, D. B. (2005). Motivating gifted students. Waco, TX: Prufrock Press.

Sinclair, M. F. (1994). Are we pushing students in special education to drop out of school? Minneapolis, MN: University of Minnesota Center on Residential Services and Community Living College of Education.

Skiba, R. J., & Peterson, R.L. (1999). The dark side of zero tolerance: Can punishment lead to safe schools? Phi Delta Kappan, 80, 372-382.

Skiba, R.J., & Peterson, R.L. (2000). School discipline at a crossroads: From zero tolerance to early response. Exceptional Children, 66(3), 114-129

Skinner, B. F. (1953). Science and human behavior. New York, NY: MacMillan.

Skinner, C. H., Fletcher, P. A., & Henington, C. (1996). Increasing learning rates by increasing student response rates: A Summary of research. School Psychology Quarterly, 11, 313-325.

Skinner, C. H., Smith, E. S., & McLean, J. E. (1994). The effects of intertrial interval duration on sight-word learning rates in children with behavioral disorders. Behavioral Disorders, 19, 98-107.

Smink, J., & Schargel, F. P. (2004). Helping students graduate: A strategic approach to dropout prevention. Larchmont, NY: Eye on Education.

Sprague, J., Smith, S., and Stieber, S. (2002). Principal Perceptions of School Safety. Journal of School Violence, 1(4): 51-64.

Strauss, A., & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Thousand Oaks, CA: Sage Publications.

Supplee, P. L. (1990). Reaching the gifted underachiever. New York, NY: Teacher's College Press.

Sutherland, K. S. (2000). Promoting positive interactions between teachers and students with emotional and behavioral disorders. Preventing School Failure, 44, 110-115.

Sutherland, K. S., & Wehby, J. H. (2001a). The effect of self-evaluation on teaching behaviors in classrooms for students with emotional and behavioral disorders. The Journal of Special Education, 35, 161-171.

Sutherland, K. S., & Wehby, J. H. (2001b). Exploring the relationship between increased opportunities to respond to academic requests and the academic and behavioral outcomes of students with EBD: A review. Remedial and Special Education, 22, 113-121.

Sutherland, K. S., Wehby, J. H., & Copeland, S. R. (2000). Effect of varying rates of behavior-specific praise on the on-task behavior of students with emotional and behavioral disorders. Journal of Emotional and Behavioral Disorders, 8, 2-8, 26.

Sutherland, K. S., Alder, N., & Gunter, P. L. (2003). The effect of increased rates of opportunities to respond on the classroom behavior of students with emotional/behavioral disorders. Journal of Emotional and Behavioral Disorders, 11, 239-248.

Terry, A.W. (2003). Effects of service learning on young, gifted adolescents and their community. Gifted Child Quarterly, 47, 295.

Terry, A. W., & Bohnenberger, J. E. (2003). Service learning: Fostering a cycle of caring in our gifted youth. The Journal of Secondary Gifted Education, 15, 1, 23-32.

Thurlow, M. L., Sinclair, M. F., & Johnson, D. R. (2002). Students with disabilities who drop out of school: Implications for policy and practice. Issue Brief, 1(12), Minneapolis, MN: University of Minnesota, Institute on Community Integration, National Center on Secondary Education and Transition.

United States Department of Education. (1991). National educational longitudinal study 88. Final report: Gifted and talented education programs for eighth grade public school students. Washington, DC: United States Department of Education, Office of Planning, Budget, and Evaluation.

United States Department of Education. (1993). National excellence: The case for developing America's talent. Washington, DC: United States Department of Education, Office of Educational Research and Improvement.

Voelkl, K. E. (1997). Identification with school. *American Journal of Education*, 105, 294–317.

Wagner, M. (1991). Dropouts with disabilities: What do we know? What can we do? A report from the National Longitudinal Transition study of special education students. Washington, DC: Prepared for the Office of Special Education Programs, U.S. Department of Education.

Watkins, M.W., & Glutting, J.J. (2000). Incremental validity of WISC-III profile elevation, scatter, and shape information for predicting reading and math achievement. Psychological Assessment, 12, 402-408.

Wehby, J. H., Symons, F. J., Canale, J. A., & Go, F. J. (1998). Teaching practices in classrooms for students with emotional and behavioral disorders: Discrepancies between recommendations and observations. Behavioral Disorders, 5214-5,6.

West, R. P., & Sloane, H. N. (1986). Teacher presentation rate and point delivery rate: Effect on classroom disruption, performance accuracy, and response rate. Behavior Modification, 10, 267-286.

Whitmore, J. R. (1980). Giftedness, conflict, and underachievement. Boston, MA: Allyn & Bacon.

Wolfle, J. A. (1991). Underachieving gifted males: Are we missing the boat? Roeper Review, 13, 181–184.

Yoder, P. J., & Feurer, I. D. (2000). Quantifying the magnitude of sequential association between events or behaviors. In T. Thompson, D. Felce, & F. J. Symons (Eds.), Behavioral observation: Technology and application in developmental disabilities (pp. 317-333). Baltimore, MD: Brookes.

Yoder, P., Short-Myerson, K., & Tapp, J. (in press). Measuring behaviour with a special emphasis on sequential analysis of behaviour. In E. Emerson, C. Hatton, T. Parmenter, & T. Thompson (Eds.), International handbook of applied research in intellectual disabilities. West Sussex, England

APPENDIX A

PARTICIPANT RECRUITMENT SCRIPT

"Hello, my name is Mr. Davis. I will be conducting a research study here at WGHS in which you have been selected as a possible candidate. My study will involve students like yourself who have high test scores along with 3 or more office referrals in the last school year. I will help you identify some of your strengths and interests and then match you with a teacher from WGHS who can help your develop a product or service that meets a real world need and or solves a real world problem using those strengths and interests."

"This will take place over the fall semester during class time or before or after school if you and your mentor teacher wish to do that."

Do you have any questions? Does this sound like something you would be interested in doing"

"Thanks for your time"

Please let me know if I need to do anything else.

Thanks again,

Derek

APPENDIX B

PARENTAL CONSENT FORM

PARENTAL/ LEGAL GUARDIAN PERMISSION and CONSENT FORM: Walnut Grove High School

I agree for my child and I to participate in the research study titled "Teachers Facilitating Type III Investigations to address the Needs of High Ability Students with a History of Discipline Referrals", that is being conducted by Derek Davis, who is a doctoral student in Gifted and Creative Education in the Department of Educational Psychology at the University of Georgia, and is a special education teacher at Walnut Grove High School. (678) 507-3920. This study is conducted under the supervision of Dr. Thomas Hebert in the Department of Educational Psychology at the University of Georgia (706-542-3678).

Participation is voluntary. I or my child can refuse to participate, and my child or I can stop taking part at any time without penalty or loss of benefits to which we are otherwise entitled. The decision to take part in this study or not to take part in this study will not affect my child's grades or class standing. I can ask to have the information to the extent that it can be identified as mine or my child's, returned to me, removed from the research records, or destroyed.

The following points have been explained to me:

1. The purpose of this project is to explore the impact of using a Type III investigation in which students participate in an independent research project. In this project, they work with a mentor teacher to create a product that addresses a real world problem using their individual strengths and interests.
2. The procedures are as follows:
   - My child will complete an interest inventory and will then be paired with a compatible mentor-teacher to assist in completion of their project.
   - Some data, such as my child's attendance record, grades, test scores, behavioral referrals, etc., will also be collected from my child's school records at the beginning and throughout the study.
   - My child will be interviewed by Derek Davis before the independent project begins. This interview will be audio-recorded.
   - My child, my child's teachers, and I will be asked to complete rating scales from the Behavior Assessment System for Children (BASC-2).
   - My child will work with his/her mentor-teacher throughout the semester from 8-10-11 to 12-15-11 at times negotiated between him/her and his/her teachers to develop a final product. During the semester, my child will be observed by Derek Davis as he/she works on his/her given project.

- My child will be asked to complete journal entries and written reflections about his/her participation in the project. These will be collected every four weeks by the researcher.
- At the conclusion of the project, my child will be interviewed again.
- I will be asked along with my child's teachers to complete BASC-2 rating scales again.
- My child's total time commitment will be between 4.5 and 7.5 hours over 18 weeks.

3. My participation will include completing the BASC-2 parent rating scale before and after the independent project. I will also have at least one phone call with Mr. Davis of at least 5 minutes for a total time commitment of 45-50 minutes. I can skip any questions I do not wish to respond to.
4. Individually-identifiable data collected from me and my child will be confidential unless otherwise required by law, and no data will ever be reported with my child's nor my name associated with it. Derek Davis will remove or replace individually-identifiable information by using pseudonyms once all observations and interviews have taken place. Only Derek Davis will have access to the recorded interviews. These audio recordings will be stored in Derek Davis' locked office at Walnut Grove High School and will be destroyed after they have been transcribed.

5. There are no anticipated discomforts or stress. There is the possibility that my child may be uncomfortable with his/her assigned teacher. If my child becomes uncomfortable for any reason, Mr. Davis will make every effort to make accommodations and arrangements to remedy any discomfort. My child may withdraw from the study at any time at his/her discretion.
6. No risks are foreseen. If any difficulties arise with my child meeting his/her academic obligations as a result of participating in this study, Mr. Davis will coordinate with my child's teachers to insure that instructional time and assignments are not missed.
7. I understand that I will have the opportunity to share opinions about my child's educational experiences. My child will have the opportunity to work in a selected area of interest under the direction of a teacher with expertise in that area. Participation in this project may lead to improved attitude toward school and improved behavior. I also understand that this information will help researchers and teachers like Derek Davis find more effective strategies of working with high ability students who have a history of office referrals.
8. The investigator will answer any further questions about the research, now or during the course of the project and can be reached at (678) 507-3920.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to the participation of my child and myself in this study. I have been given a copy of this consent form.

_____ _____

_____

Derek Davis Signature Date
Telephone: (678) 507-3920
Email: dtex@uga.edu

_____
Name of Child

_____ _____

Name of Parent/Legal Guardian Signature Date

Additional questions or problems regarding your and your child's rights as a research participant should be addressed to the Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

APPENDIX C

PARTICIPANT ASSENT FORM

STUDENT CONSENT/ASSENT FORM

You are invited to participate in a research study titled "Teachers Facilitating Type III Investigations to Address the Needs of High Ability Students with a History of Discipline Referrals" conducted by Derek Davis from the University of Georgia under the direction of Dr. Tom Hebert, Department of Educational Psychology and Instructional Technology, University of Georgia (542-3678). Your participation is voluntary. You do not have to take part in this study if you do not want to. Your selection for this study is based upon your past test scores, grades, and office/discipline referrals obtained from a student information database. You can decide not to take part or to stop taking part in this study at any time. You will not be penalized for your decision or lose access to services or benefits that you would normally have access to. If you stop taking part in the study, you can ask to have all of the information that can be identified as yours returned to you, removed from the research records, or destroyed.

The purpose of this study is to study the effects of using a Type III intervention/independent project on school performance and behavior. If you volunteer to take part in this study, you will be asked to do the following things:

1. **Complete an interest inventory to identify your strengths and areas of interest. (15-20 minutes)**
2. **Complete a rating scale that will help you understand your academic, behavioral, and social functioning. (2 times for 15-20 minutes each)**
3. **Work with a mentor teacher during the fall semester to develop an independent project that solves a real world problem and or meets a real world need. The amount of time required for this project will be approximately 3-5 hours in addition to your regular class schedule. This will include completing journal entries and written reflections about your participation.**
4. **Participate in two audio-recorded interviews of 30-60 minutes each with Mr. Davis at the beginning and end of the project as well as 16 observations throughout the semester for a total time commitment of 4.5-7.5 hours for the whole project.**

Direct benefits for you are that you will have the opportunity to work in a selected area of interest under the direction of a teacher with expertise in that area. You will be able to negotiate your work sessions with your mentor teacher. In the event that you have a class with your mentor teacher, your participation in this project will make up part of your grade for that class. You will also be allowed to make arrangements with your other classroom teachers if you need to work on your project during the school day. This study will also benefit other teachers and students who may take part in this kind of project in the future. This study may provide a new way for students and teachers to work together to solve problems and help improve student performance and behavior.

The only foreseeable risks of participating in this study are that it may interfere with instructional time in some of your classes and or you may become uncomfortable with your assigned mentor teacher. You may have to miss class time as you work on this project with your mentor teacher. Mr. Davis will work with your teachers if this becomes the case so you will still be able to have access to materials, be able to take assessments, and complete assignments. If you need to be assigned to a different mentor teacher, Mr. Davis will coordinate that as well.

No information that can be used to identify you will be shared with others without your written permission, unless required by law. All audio recordings will be stored in Mr. Davis' office. Mr. Davis will be the only person who will have access to these recordings. When the recordings are transcribed, all individually-identifiable information will be removed or changed to pseudonyms. All audio recordings will be destroyed after they have been transcribed.

Mr. Davis will answer any further questions about the research, now or during the course of the project.

Your signature on this form shows that you agree to take part in this research project. You will receive a signed copy of this consent form for your records.

_____	_____	_____
Name of Researcher	**Signature**	**Date**
Telephone: _____		
Email: _____		
_____	_____	_____
Name of Participant	**Signature**	**Date**

Please sign both copies, keep one and return one to the researcher.

Additional questions or problems regarding your rights as a research participant should be addressed to The Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

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Expires 7-18-12

APPENDIX D

MENTOR CONSENT FORM

MENTOR TEACHER CONSENT FORM: Walnut Grove High School

I consent to participate in the research study titled "Teachers Facilitating Type III Investigations to address the Needs of High Ability Students with a History of Discipline Referrals", that is being conducted by Derek Davis, who is a doctoral student in Gifted and Creative Education in the Department of Educational Psychology at the University of Georgia, and is a special education teacher at Walnut Grove High School. (678) 507-3920. This study is conducted under the supervision of Dr. Thomas Hebert in the Department of Educational Psychology at the University of Georgia (706-542-3678).

My participation is voluntary. I can refuse to participate or I can stop taking part at any time without penalty or loss of benefits to which I am otherwise entitled. I can ask to have the information related to me, to the extent that it can be identified as mine, returned to me, removed from the research records, or destroyed.

The following points have been explained to me:

1. The purpose of this project is to explore the impact of using a Type III investigation in which students participate in an independent research project. In this project, they work with a mentor teacher to create a product that addresses a real world problem using their individual strengths and interests.
2. The procedures are as follows:
    - I will be paired with a student participant based upon the results of an interest inventory.
    - I will attend an individual orientation of the Type III investigation presented by Mr. Davis.
    - The student and I will identify a real world problem from the student's area of interest and my area of expertise. I will serve as a mentor for the student while I supervise him/her as they develop a product or service that addresses the problem they have identified. I will work with my assigned student throughout the semester from 8-10-11 to 12-15-11 at times negotiated between him/her and his/her teachers to develop a final product. These times will be in addition to my regular instruction time unless the student is scheduled in one of my classes.
    - During the semester, I will communicate with Derek Davis by email twice a week about my student's progress.
    - The student and I will be observed by Derek Davis each week for 10-15 minutes per visit.
    - I will also be interviewed once by Mr. Davis about my participation in this project for 30-60 minutes. The interview will be audio-recorded.
    - I will also be asked to complete the BASC-2 rating scale which will take 10-15 minutes.
    - My total time commitment for this study will be between 3.5 and 6 hours over 18 weeks.
3. Individually-identifiable data collected on me will be confidential. No data will ever be reported with my name associated with it. Audio-recordings will be transcribed and individually-identifiable data will be replaced with pseudonyms. Only Derek Davis will have access to the recorded interviews. These recordings will be stored in Derek Davis' locked office at Walnut Grove High School and will be destroyed after they have been transcribed.
4. No risks or discomforts are foreseen. If any difficulties arise with my ability to meet my teaching obligations as a result of participating in this study, Mr. Davis will coordinate with the participant and school administration as needed to insure that my instructional time and duty assignments are not missed. If I become uncomfortable for any reason, Mr. Davis will make every effort to make accommodations and arrangements to remedy any discomfort. I may withdraw from this study at any time at my discretion.
5. I may benefit from having a meaningful way to develop and/or explore other aspects of my area

University of Georgia
Institutional Review Board
Approved: 7-19-11
Expires 7-18-12

of expertise in an alternate format. This study may benefit other teachers and students who may take part in this kind of project in the future. This study may provide a new way for students and teachers to work together to solve problems and help improve student performance and behavior.

6. The investigator will answer any further questions about the research, now or during the course of the project and can be reached at (678) 507-3920.

I understand the procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study. I have been given a copy of this consent form. I agree to participate in this study.

Derek Davis **Telephone: (678) 507-3920** **Email: dtex@uga.edu**	**Signature**	**Date**
Name of Mentor Teacher Participant	**Signature**	**Date**

Additional questions or problems regarding your rights as a research participant should be addressed to the Chairperson, Institutional Review Board, University of Georgia, 629 Boyd Graduate Studies Research Center, Athens, Georgia 30602-7411; Telephone (706) 542-3199; E-Mail Address IRB@uga.edu

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Institutional Review Board
Approved: 7-19-11
Expires 7-18-12

APPENDIX E

PARTCICPANT INTERVIEW PROTOCOLS

1. Tell me about your past experience with school. What have you liked? Disliked?
2. Describe your strengths? What are you good at?
3. Describe your weaknesses?
4. Do you consider yourself a good student? Why or why not?
5. How would you describe yourself to someone who didn't know you?
6. Tell me about your family.
7. Describe the goals you have for after you complete high school?
8. If you could do anything and make a living at it what would it be?
9. What are your hobbies and interests?
10. Describe what your life might look like in five years?

1. Describe the problem you identified and solved in this investigation?
2. Tell me about this experience. What did you enjoy? What did you find challenging?
3. Describe your relationship with your mentor teacher?
4. Has this experience changed your attitude toward school? How? Why? Why not?
5. How has your view of yourself changed as a result of this experience?
6. How will this experience impact you as a student at WGHS?

APPENDIX F

MENTOR INTERVIEW QUESTIONS

1. Describe your experience of facilitating a Type III investigation.
2. What aspects did you find challenging?
3. What did you find to be most rewarding?
4. How do you feel this experience impacted the student you worked with? Tell me a story or share something that helps me understand.
5. Provide an example of how this student will be more successful in school as a result of this experience?
6. Is there anything else you wish to add?