A Mixed Methods Approach to Using Collaborative and Proactive Solutions with Students with Emotional and Behavioral Disorders while Applying the Self-Determination Theory

Andrea J.M. Rock
St. John Fisher College, ajr08632@sjfc.edu

Follow this and additional works at: https://fisherpub.sjfc.edu/education_etd

Part of the Education Commons

How has open access to Fisher Digital Publications benefited you?

Recommended Citation

Please note that the Recommended Citation provides general citation information and may not be appropriate for your discipline. To receive help in creating a citation based on your discipline, please visit http://libguides.sjfc.edu/citations.

This document is posted at https://fisherpub.sjfc.edu/education_etd/314 and is brought to you for free and open access by Fisher Digital Publications at St. John Fisher College. For more information, please contact fisherpub@sjfc.edu.
A Mixed Methods Approach to Using Collaborative and Proactive Solutions with Students with Emotional and Behavioral Disorders while Applying the Self-Determination Theory

Abstract

Students with emotional and behavioral disorders (EBD) that lack social skills and problem solving have stronger features of depression, higher drop-out rates and struggle with peer relations. With such an emphasis on academics in high school, students still need strategies taught to compensate for skill deficits in problem solving, relationship-building and choice making. This pragmatic mixed methods study used pre-and post-assessment data from the self-determination theory and examined the implementation of collaborative and proactive solutions through focus groups of teachers and mental health practitioners that work with students with EBD in a special education high school. While quantitative data was not significant, focus group findings specified changes in restructuring the current schedule, trust, time, buy-in and predominantly leadership implications. Recommendations for future studies include additional data sets to be included in the study; choosing elementary or middle school student populations; and applying a leadership frameworks at the onset of implementing collaborative and proactive solutions. Limitations of this study consisted of a small sample size and typical limitations of a focus group. This study adds to current gaps in high-school students with EBD, self-determination, and collaborative and proactive solutions.

Document Type
Dissertation

Degree Name
Doctor of Education (EdD)

Department
Executive Leadership

First Supervisor
Susan M. Schultz

Subject Categories
Education

This dissertation is available at Fisher Digital Publications: https://fisherpub.sjfc.edu/education_etd/314
A Mixed Methods Approach to Using Collaborative and Proactive Solutions with Students with Emotional and Behavioral Disorders while Applying the Self-Determination Theory

By

Andrea J.M. Rock

Submitted in partial fulfillment of the requirements for the degree Ed.D. in Executive Leadership

Supervised by

Dr. Susan M. Schultz

Committee Member

Dr. Michelle M. Ryan

Ralph C. Wilson, Jr. School of Education
St. John Fisher College

August, 2017
Dedication

“She believed she could, so she did.”

This work is dedicated to my daughters, Olivia and Alexa. You can do anything you put your mind to. Thank you for your support and understanding while I have been in the basement researching and writing. This is also dedicated to my grandmother who told me to “Just go get the doctorate already!” Most of all, this would not have been possible without the support of my parents, and my husband, who kept everything running while I was not available, and who encouraged me through this entire journey. Thank you for supporting me.
Biographical Sketch

Andrea Rock is currently the Assistant Principal of Transition and Secondary Programs at Monroe 1 BOCES. Ms. Rock attended Keuka College for her Bachelors of Science in Special Education. She attended Nazareth College for her Masters of Science in Education in Special Education, and SUNY Brockport for her Certificate of Advanced Study in School Administration. She came to St. John Fisher College in May of 2015 and began her doctoral studies in the Ed.D. Program in Executive Leadership. Ms. Rock pursued her research in Education under the direction of Dr. Susan M. Schultz and Dr. Michelle M. Ryan and received the Ed.D. Degree in 2017.
Acknowledgements

I am grateful to Monroe 1 BOCES where I have worked for 19½ years. This document would not be possible without the collaborative support of so many within our organization. I would like to personally acknowledge: Dan White, District Superintendent; Dr. Cherie Becker, Director of Student Programs and Services; Bonnie Masiuk, Principal; Bill Hurley, Coordinator of Mental Health; John Walker, Coordinator, School and Community Relations; the Board of Education; JoAnn Genthner, Executive Principal of Transition and Secondary Programs, supervisor and mentor; the Mental Health staff and teaching staff of the program of study; and professional and personal support from Liz Walton, Coordinator of Consultant Teachers and Tutoring Services.

Thank you to “For Real” for keeping me in the program. The struggle is real, even when you are not unique.

Additionally, I would like to thank my chair, Dr. Susan Schultz, and committee member, Dr. Michelle Ryan, for entertaining my “crazy.”
Abstract

Students with emotional and behavioral disorders (EBD) that lack social skills and problem solving have stronger features of depression, higher drop-out rates and struggle with peer relations. With such an emphasis on academics in high school, students still need strategies taught to compensate for skill deficits in problem solving, relationship-building and choice making. This pragmatic mixed methods study used pre-and post-assessment data from the self-determination theory and examined the implementation of collaborative and proactive solutions through focus groups of teachers and mental health practitioners that work with students with EBD in a special education high school. While quantitative data was not significant, focus group findings specified changes in restructuring the current schedule, trust, time, buy-in and predominantly leadership implications. Recommendations for future studies include additional data sets to be included in the study; choosing elementary or middle school student populations; and applying a leadership frameworks at the onset of implementing collaborative and proactive solutions. Limitations of this study consisted of a small sample size and typical limitations of a focus group. This study adds to current gaps in high-school students with EBD, self-determination, and collaborative and proactive solutions.
# Table of Contents

Dedication .......................................................................................................................... iii  
Biographical Sketch ......................................................................................................... iv  
Abstract ............................................................................................................................. vi  
Table of Contents .............................................................................................................. vii  
List of Tables ..................................................................................................................... ix  
Chapter 1: Introduction ................................................................................................. 1  
  Problem Statement ......................................................................................................... 9  
  Theoretical Rationale ................................................................................................. 11  
  Statement of Purpose ................................................................................................ 17  
  Research Questions .................................................................................................... 17  
  Potential Significance of the Study ............................................................................ 18  
  Definitions of Terms .................................................................................................. 19  
  Chapter Summary ...................................................................................................... 22  
Chapter 2: Review of the Literature .............................................................................. 23  
  Introduction and Purpose ........................................................................................... 23  
  Students with EBD ..................................................................................................... 24  
  Self-Determination ................................................................................................... 32  
  Response to Intervention (RtI) .................................................................................. 40  
  Chapter Summary ...................................................................................................... 43  
Chapter 3: Research Design Methodology .................................................................... 44
## List of Tables

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 3.1</td>
<td>Mental Health Practitioner Participants</td>
<td>47</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Teacher Participants</td>
<td>48</td>
</tr>
</tbody>
</table>
Chapter 1: Introduction

The Individuals with Disabilities Education Improvement Act (IDEIA) and Section 504 of the Rehabilitation Act are educational laws that mandate service delivery in schools that require school districts and programs to respond to underachievement and identification of students who are struggling academically and emotionally (U.S. Department of Education, 2015). Historically, students who had special needs were institutionalized or did not receive an education. In 1967, state institutions were homes for almost 200,000 persons with significant disabilities. Many of these restrictive settings provided only minimal food, clothing, and shelter (U.S. Department of Education, 2016). Several reauthorizations of IDEIA have occurred since then to offer fair, comprehensive programs to students with disabilities through a Free Appropriate Public Education (FAPE). Since 1967, the laws have been reauthorized to provide more appropriate education settings, guiding laws for student rights and responsibilities and protections of students and families. Procedural safeguards protect the individual student to be appropriately placed in school. In the most recent reauthorization of IDEIA, the federal government mandated No Child Left Behind, which recently changed to Every Student Succeeds Act. Through this act, the law mandates that schools respond to underachievement of students. These laws do not suggest prescribed frameworks but do allow states to empower agencies and districts to decide if a student responds to specific interventions (Sultowski, Joyce, & Storch, 2012). Response to Intervention (RtI), one
such intervention, is a three-tiered framework that many school districts have adopted to identify struggling students.

The focus of RtI programs is to support primary prevention and use early intervention service delivery (Sultowski et al., 2012). Education Law and IDEIA now mandate that services such as RtI be put in place for prevention of students falling below grade level in school districts. RtI is being applied to address youth with various academic, behavioral, and medical needs (Fletcher & Vaughn, 2009; Sultowski et al., 2012).

Most RtI models have a framework of three tiers. Tier 1 is universal throughout the school. It could be a bullying prevention program or screening of anxiety or other disorders that address the needs of all students. Tier 1 supports about 85% of the school population. Tier 2 supports could be resource room assistance or moderate services such as health interventions from a nurse to provide care for someone with diabetes. Another example is short-term counseling for a student going through a life change such as a parent’s death or divorce. A counselor could be a check in person to provide support daily (Sultowski et al., 2012). Tier 2 supports provide services to about 10-15% of the population. Tier 3 is intense support to target the students with the most need. This tier could be used when Tier 1 and 2 prove ineffective. Tier 3 services could lead to labeling a student for special education services, or if already labeled, could offer temporary support for the student to reengage in the program, and then return to a Tier 2 support. Typically, Tier 3 is administered individually to less than 5% of the population of students who display symptoms or problems that significantly impair their educational performance and/or psychosocial functioning (Cheney & Yong, 2014).
Many schools have adopted RtI for academic purposes. Schools can adopt a model within the RtI framework to implement for students who are struggling behaviorally. Tier 1 programs within RtI have not been widely studied for behavioral programs and it is difficult to gain data on whether these prevention programs are effective unless the school has been part of a clinical trial. Certain students qualify for Tier 2 supports and may receive group counseling; thus some schools may implement a behavior rating scale and then the student will receive Tier 2 supports (Sultowski et al., 2012). Tier 3 intervention services are delivered to students who are unresponsive to the Tier 1 and Tier 2 supports and exhibit a degree of behavior that requires an individual approach.

One major drawback of the RtI model is that it is labor intensive and requires all the school personnel to be trained. School nurses, guidance counselors, mental health clinicians, and teachers all need to be trained to implement the different tiers and recognize if a student requires a different level of intervention. Tier 3 requires specific training to deliver programs such as cognitive behavioral therapy (CBT) interventions. Specific approaches consist of modeling relaxation, exposure to anxiety provoking incidents, problem solving and self-reflection (Sultowski et al., 2012). Specific models are time consuming, labor intensive, expensive and require staff training. However, due to federal mandate, school districts are still responding to IDEIA by adopting specific models of RtI to respond to students who need additional support.

Typically, students with emotional and behavioral disorders (EBD) are identified as struggling, are classified under IDEIA and receive special education services. Emotional disturbance is described as a condition exhibiting one or more of the following
characteristics over a long period of time and to a marked degree that adversely affects a student’s educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a generally pervasive mood of unhappiness or depression; or (e) a tendency to develop physical symptoms or fears associated with personal or school problems (New York State Education Department, [NYSED], 2016). Compared to other disability groups, students with EBD characteristically present more behavioral and academic problems in and out of the classroom (Nelson, Benner, Lane, & Smith, 2016). In the classroom, students with EBD often lack social skills and problem solving skills that are necessary to transition to post-secondary education or employment, and subsequently require support services. They are often diagnosed with depression, anxiety and lack fundamental skills for education (Kauffman, Bruce, & Lloyd, 2012). Students with EBD may have lagging skills due to attendance issues caused by suspensions and time missed from class due to behavioral problems.

Students with EBD can have periods of normal behavior and have a period of serious misconduct (Kauffman et al., 2012). The latter may include patterns and hostile interactions that interfere with classroom teaching and are detrimental to peer relations. Emotional and behavioral problems can often interfere with academic, interpersonal and vocational development throughout a student’s school years. Per the U.S. Department of Education, over 373,000 students are labeled with EBD (http://www.ed.gov). A child with a behavior disorder typically gets classified into a special education system sometime in their development because they show periods of stability interrupted by
erratic behaviors that impede their daily living. However, the impeding behavior must be shown over a period to be labeled EBD. Additionally, many children with EBD often struggle with anxiety disorders, mental illness such as bipolar disorder, eating disorders, and conduct disorders (http://www.ccbd.net). They often struggle academically because of poor choices they make in the classroom. Characteristics of a student with EBD may include hyperactivity, aggression, withdrawal, immaturity, and learning difficulties. Students with EBD often have average to above average IQ but possess deficits in reading, math and written language (Lane, Carter, Pierson, & Glaeser, 2006). Students with behavioral disorders may have distorted thinking and may react emotionally to the environment in an abnormal way.

Students with EBD usually show emotional behaviors to a degree that makes it difficult for them to be educated with the general population. They are often placed in an alternative setting with peers of similar disability and require interventions or supports to learn skills or compensatory strategies to manage their environment and respond appropriately to environmental stressors (Cullinan & Sabornie, 2004; Kern, 2015). Per education law, the student with EBD must be educated in the least restrictive environment (LRE), closest to their home, to appropriately meet their needs (NYSED, 2016). The range of special education services offer a continuum of support that may start with a consultant teacher or a resource room in the general education setting. If the student is not having success, they may be moved to a more restrictive placement such as a self-contained classroom within their own district or a center based classroom which could be in or out of district. If that placement is not meeting the student’s needs, another placement could be a day-treatment facility or a residential placement. Behaviors that
impede learning and require multiple placements within the student’s schooling history can also have a negative effect on development, academic performance and relationships.

Students with EBD are 51% more likely to drop out of school than any other student with a disability. Only 42% of students with EBD graduate with a diploma (Cullinan & Sabornie, 2004). A recent study from the University of California, Los Angeles, indicates that suspensions are closely linked to school dropout and referrals to law enforcement (Sparks, 2016). Based on the characteristics of an inability to learn, relationship problems, inappropriate behaviors, unhappiness or depression, physical symptoms and fear, the student is less likely to succeed in an educational facility. The student is less likely to learn and is often rejected by peers because of lack of empathy or problem solving skills. Nelson, Benner, Lane and Smith (2016) found that types of behavior problems are related to academic achievement. Additionally, Epstein, Kinder and Bursuck (1989) found that students with EBD had more issues with reading and math. When academic performance is poor, or competence is lagging, the student experiences failure.

Autonomy can be narrowed for the student with EBD due to academic failure or poor choices made in the environment, because the student could experience rejection by peers for poor choices and conduct problems. Cullinan and Sabornie (2004) found that students with EBD were judged more by their teachers as having relationship problems, inappropriate behaviors, and social maladjustment more than their peers without disabilities. Disruptions in the academic environment and social skill deficits could be reasons for poor relationship skills.
Students with emotional and behavioral disorders have limited awareness and knowledge of self-determination skills (Carter, Lane, Crnobori, Bruhn, & Oakes, 2011). If the educational structure is the perfect social environment for a developing student, then identifying the instructional needs of students with EBD is critical to compensate for skill deficits. In the field of special education, self-determination skills can be taught appropriately at any developmental age level of education. These specific skills taught are choice making, problem solving and relationship building.

As humans develop, they develop certain personal traits that contribute to personality development and behavioral self-regulation. These traits are competency, autonomy and relatedness (Ryan & Deci, 2000). These traits are proven to drive intrinsic motivation. Social contexts allow people to satisfy their basic psychological needs for competence, relatedness and autonomy. Social environments can facilitate or debilitate intrinsic motivation by factors present within their environment. Mithaug, Wehmeyer, Agran, Martin and Palmer (1998) define self-determination as the repeated use of skills necessary to act on the environment to attain goals that satisfy self-defined needs and interests. Additionally, Wehmeyer (2003) believes people who are self-determined will regulate their own problem solving to attain their own goals. Students with emotional and behavioral disorders can acquire skills and take advantage of opportunities when self-determination skills and traits are taught. Factors that can contribute to successful transitions are social skill training, problem–solving training and relationship building (Field & Hoffman, 2012). Through the self-determination theory, students should feel competent, autonomous, and related to be intrinsically motivated. Students who have EBD may have one or more of these components lacking or missing. Specific skills that
are lacking should be diagnosed, and then appropriately taught to enable the student to develop successful relationships and transitions to adulthood.

One model that can be adopted to address students who are struggling is collaborative and proactive solutions (CPS) (Greene, 2016). Greene (2011) believes “kids do well if they can” (p. 26). CPS is a cognitive-behavioral model that practitioners and students use to collaboratively identify a problem area and come up with possible solutions. CPS is a three-plan model which should be worked on proactively by the school team and the student when the student is not in crisis or demonstrating the lagging skill. The first step of this model is to identify what skills are lagging. The student may identify challenges such as getting started with classroom work, transitioning in the hallways, or getting along with a peer. This initial step of problem identification is called the Assessment of Lagging Skills and Unsolved Problems (ALSUP). This step is meant to be implemented as a discussion with the student involved. The lagging skill is considered an “unsolved problem.”

The next phase of the CPS method is broken into a three-plan framework. Plan A is a reward and punishment system. Plan A involves the problem being solved unilaterally by an adult imposing a decision or consequence. Token economy systems are extrinsic motivators that do not have long-term effectiveness (Guay, Ratelle, & Chanal, 2008). Additionally, Deci, Hodges, Peirson and Tomassone (1992) believe that extrinsic controls can be detrimental to self-regulation. Plan B involves the staff member and the student collaborating on three steps: (a) the Empathy step: the adult gathers information from the student to get a clear understanding of the student’s perspective; (b) Defining the problem: the adult expresses their concern over the unsolved problem; (c) the
Invitation step: the student and adult brainstorm and identify satisfactory solutions that are acceptable in the school climate. Plan C involves prioritizing some unsolved problems to a lower rank, or putting them into a “holding pen.” By allowing for Plan C, the student and adult are less likely to become overwhelmed with too many unsolved problems.

The final phase of the CPS process is to plan and implement Plan B. Conversations with the adult and the student will focus on what the student can do to solve their lagging skill of Plan B. By using the CPS method of problem solving that identifies lagging skills, students will learn competent skills that will allow them to relate to their peers and teachers and have more control in the environment around them. Under the correct social conditions, the inherent inner resources of a student can be nurtured and self-organized to flourish. The perspective of the self-determination theory also allows practitioners to move away from controlling external variables, but become facilitators and guides in the social context (Niemiec & Ryan, 2009). When students can be resourceful problem solvers and confident in skills, they will become lifelong achievers of success.

**Problem Statement**

Emotional and behavioral problems can often interfere with academic, interpersonal and vocational development throughout the student’s school years (Plotts, 2012). High school can be challenging for a student with EBD that lacks the social skills and problem solving skills necessary to navigate the environment. If a student is lacking competency, or specific social skills that lead to competent behaviors, the student is more likely to be depressed, struggle with peer relations, and drop out of school. The student
could also end up in a revolving cycle with the judicial system (Pierson, Carter, Lane, & Glaeser, 2006). With such emphasis on academics in high school education, students with EBD still need strategies taught to compensate for skill deficits in problem solving, relationship-building and choice making to improve competency, autonomy, and relatedness. Empirical evidence on the self-determination theory suggests:

Intrinsic motivation and autonomous types of extrinsic motivation are conducive to engagement and optimal learning in educational contexts. In addition, evidence suggests that teachers’ support of students’ basic psychological needs for autonomy, competence and relatedness facilitates students’ autonomous self-regulation for learning, academic performance and well-being (Niemiec & Ryan, 2009, p 133).

Per New York State graduation requirements, students are expected to spend 120 hours of seat time in the classroom to earn one unit of credit for a class. Students in New York are required to obtain 22 credits to graduate (http://www.p12.nysed.gov/part100, 2016). A student may have 4-8 credit bearing classes each day. If a student is not in class because of a behavioral infraction, a significant amount of instruction is missed which causes gaps in academic and behavioral skills.

Additionally, New York State requires teachers to now participate in the Annual Professional Performance Review (APPR) which rates teacher’s performance based on students’ growth and scores on exams. Teachers are expected to set annual academic goals for students to meet or exceed at the end of the year. This increases the demand for a rigorous academic program for students throughout their schooling.
Theoretical Rationale

As children grow, they develop certain self-determination skills that allow for control over their own life. These skills are autonomy, relatedness, and competence, which are known to drive or hinder motivation and personality (Ryan & Deci, 2000). Students with EBD can lack self-determination skills (Carter, Trainor, Owens, Sweden, & Sun, 2010). By recognizing skill deficits, educators can teach specific strategies in problem solving and social skills to students in a small group setting. Students who have control over their environment can advocate for their needs which lead to positive adult and post-secondary outcomes (Eisenman, 2007, Kelly, & Shogren, 2014).

The self-determination theory is based on three guiding principles: autonomy, competence, and relatedness. The theory is a psychological approach to human motivation and personality that uses traditional empirical methods while highlighting the importance of personality development and behavioral self-regulation (Ryan & Deci, 2000). By being self-determined, a person can grow developmentally and make sense of the environment around them. They can integrate their personality into their culture for personal well-being. Intrinsic motivation allows a person to explore and assimilate to their environment. Internal motivation allows the person to integrate and regulate their behavior into their environment. Autonomy, relatedness and competence are the main needs in a person that should be met to have intrinsic motivation.

Autonomy of the environment is particularly important with students with emotional and behavioral disorders. Lagging problem solving skills could attribute to students’ limits of choices with environmental factors. Students with emotional and behavioral disorders may have high disengagement and dissatisfaction with school which
could lead to an alternative placement. The alternative placement could limit interactions with general educated peers and adults and decrease opportunities of choice in school and extracurricular activities (Pierson, Carter, Lane, & Glaeser, 2008). Skill deficits in problem-solving skills, choice making skills and social skills can impede the student with emotional and behavioral disorders to such an extent where the student may feel as if there is no control in their life. Deci, Hodges, Pierson and Tomassone (1992) believe more research needs to be done on promoting competency and autonomy with special populations rather than using traditional strategies of controlling student behavior. Offering choice, acknowledgement of feelings, and opportunities for self-direction create autonomy for any person which leads to higher intrinsic motivation.

Competence refers to skills. If a people are good at something, they are more likely to receive positive feedback to enhance motivation. Deci, Vallerand, Pelletier, and Ryan (1991) state that positive feedback has been found to increase intrinsic motivation because it enhances competence. When a person shows competence in education, interpersonal relations or leisure, it affects cognition and behavior. Positive feedback gains positive experiences. Academic skills and sports are an example of competency. When people perform well, they are more likely to try to repeat the performance or do better. Vallerand (2001) looked at competency from a hierarchical model of intrinsic and extrinsic motivation. Social factors that contribute to intrinsic motivation are global, contextual and situational. If a person has a low level of intrinsic motivation in the classroom, the feedback will be negative, which continues the cycle of negativity, which affects competence. When a person does not do well and receives negative feedback, the person may not be willing to improve their skills. Student engagement in learning
contributes to a sense of competence through the perception of how they are treated by
the school and social environment and if their efforts are recognized (Van Ryzin, 2011).

Relatedness is an important part of the school environment. A student who feels
connected to peers is secure and satisfied in the classroom (Madill, Gest, & Rodkin,
2014). Hughes (2011) reports that students who feel a close student-teacher
connectedness are more likely to be intrinsically motivated and achieve better in learning
outcomes. When a child exhibits behavior problems, the child could be at risk for poor
relationships. Students often feel relatedness more at the elementary level than at the
secondary level (Madill et al., 2014). Additionally, staff that feel more related to students
are more likely to understand behavioral issues when they understand why the behavior
may be occurring and are equipped with proper management techniques (Greene, 1998).

While autonomy, competency, and relatedness are the three defining factors of the
self-determination theory, the student must internalize feelings through a range of
behaviors and can generalize the feelings throughout the environment. Internalization
occurs when a person receives a value and then integrates it into their own belief system.
The self-determination theory explains how non-intrinsic motivation can become self-
determined and how the social environment influences the processes (Ryan & Deci,
2000).

Deci has studied the basic inherent motivations for human behavior of extrinsic
and intrinsic motivation since the 1970s. In the 1980s, self-determination theory was
formally accepted as a sound empirical study (Ryan & Deci, 2000). People have basic
needs that need to be met through competence, autonomy, and relatedness. These three
factors influence personality integration and self-motivation. All three factors are basic
needs that a human must feel to experience well-being. The self-determination theory essentially focuses on what energizes, directs, and sustains behavior.

Focal points of extrinsic and intrinsic motivation that Deci states are paramount in the theory are internalization and integration. These factors allow for regulation of behavior across the life span (Ryan & Deci, 2000). Internalization is when a value or regulation is taken in. Integration is the transformation of the regulation into one’s self so it can be transformed into sense of self and identify with other factors. Introjected regulation is what satisfies internal contingencies, or ego involvement. External regulation is the when external rewards or punishments are controlling the behavior. Self-regulation can be on a continuum of relative autonomy based on the self-determination theory. Experiences allow for the behaviors to be demonstrated to be integrated into values. Behaviors are then assimilated and increase over time with increased cognitive capacities and ego development (Loevinger & Blasi, 1991). Four regulatory styles have been studied. Deci has primarily focused on intrinsic motivation as needing to have supportive conditions to allow development to sustain (Ryan & Deci, 2000). Intrinsic motivation is a function used to satisfy the self, while extrinsic motivation is internalized to obtain an external goal. Students who experience intrinsic motivation have felt a secure sense of belonging and connectedness to teachers and parents. The more students feel connected, the better their mental health, academic achievement, and transitions to adulthood (Kelly & Shogren; 2014; Ryan & Deci, 2000). The sense of autonomy creates a feeling of internal control, which allows regulation to be integrated. Ryan and Deci (2000) state that the three basic needs of autonomy, competence and relatedness are essential to development, and that the integration of culture are through a person’s values.
and behaviors. Individuals express their autonomy, competence and relatedness differently among different cultures. However, the basic needs are still the same.

Ryan and Deci state that when a person is autonomously engaged in therapeutic processes such as mental health therapy, they are more likely to integrate learning and behavior change into their life, which enables stronger transitional outcomes (Johnson, 2012). Autonomy is created when a person feels control over their environment. Students with emotional and behavioral disorders have less control over their environment due to lagging social skills and problem solving skills which may limit educational, social and relational choices. Field and Hoffman (2012), state that skills must be taught for students to engage in meaningful problem solving and conflict resolution to have more control over their environment. Deci (1999) also believes both autonomy and competence are necessary conditions for the maintenance of intrinsic motivation.

Positive relationship skills create a sense of relatedness in an environment. These skills are paramount in sports, the workplace, school and community. The self-determination theory supports that a person must know self and environment, and value self. This process is evident through internalizing the environment and integrating the values and beliefs (Field & Hoffman, 2012; Ryan & Deci, 2000). In the classroom, a student feels internal connectedness when they feel the teacher respects, values, and genuinely likes them (Niemiec & Ryan, 2009). Conversely, students who feel that the teacher does not like them tend to only respond to external contingencies and controls. Students who acquire skills to appropriately interact within their environment feel a sense of competence in their skills, which in turn creates a sense of relatedness (Pierson et al., 2008).
When the theory of self-determination focuses on competence, there is a strong social component when planning and working toward personal goals in the school environment. Teachers can create environments that target skills to learn to work cooperatively and students engage in peer conversations which gives them a sense of competency. Cooperative learning models are an example of positive peer relatedness where students can build relationship skills in a small group of peers. When the individual feels that they are understood by others, the need is satisfied with the ego (Johnson, 2012). Additionally, when the basic psychological needs for autonomy and competence are satisfied, intrinsic motivation can occur and flourish and deeper learning can occur (Niemiec & Ryan, 2009).

Students who engage in counseling to learn conflict resolution skills and social skill training have stronger peer relations which contribute to a sense of competence with problem solving skills (Field & Hoffman, 2012). When a student has lagging skills, problem solving in social situations is difficult. The student may act awkwardly or not know how to relate to peers in a socially acceptable manner. If the student does not know how to problem solve appropriately, the problem could manifest through anxiety or other awkward social behaviors where relationships could get damaged.

VanRyzin (2011), states that a person who possesses a strong sense of self-determination has better mental health, achieves academically and feels a sense of autonomy over transitions into the community and feels a strong sense of competence. Based on the self-determination theory, a person that recognizes goals, communicates strength, and can self-assess has a stronger sense of autonomy, competence and relatedness. A sense of autonomy and belongingness can initiate a continuous feedback
loop which continues to perpetuate a positive sense of self-worth and competence. The self-determination theory states that the individual should have these basic needs met in order to thrive and have a sense of well-being (Ryan & Deci, 2000).

**Statement of Purpose**

The purpose of this study was to (a) determine if the use of the Self-Regulation Questionnaire (version for students with LD) is an effective tool for identifying target areas of intervention for students with EBD, and (b) if the implementation of the method collaborative and proactive solutions (CPS) improves students’ skills (Deci, Hodges, Pierson, & Tomassone, 1992). Practitioners selected a sample of students from the pretest results of the Self-Regulation Questionnaire (version for students with LD) to implement the CPS model. The Self-Regulation Questionnaire (version for students with LD) was re-administered to students to identify if relative autonomy increased. Additionally, the implementation of the CPS model was qualitatively studied through the teacher’s, and mental health practitioner’s view. By using a convergent parallel mixed methods approach, Campbell and Fiske (1959) believe a psychological trait such as competence, could be best understood by gathering different forms of data (Creswell, 2014).

**Research Questions**

Primary research questions are: Is there evidence from implementing the CPS strategy that students improve autonomy, competence or relatedness? What are the successes and challenges encountered when implementing CPS? What are the teacher’s and mental health practitioner’s perspectives on implementing CPS in a special education high school setting?
Potential Significance of the Study

This study adds to the current gap in research of students with EBD at the high school level that lack autonomy, competency or relatedness in self-determination skills necessary to transition to adulthood and post-secondary outcomes. By implementing the CPS model at a small, special education specialized high school for students with EBD, the study adds to the current research by demonstrating the school staff’s view of challenges faced with implementation of this model and by analyzing effectiveness of this model by using a measure to capture growth. This study also used a Self-Regulation Questionnaire (version for students with LD) to test whether intrinsic motivation improves after implementing the CPS model. Although there are already over 200 publications that apply the self-determination theory in education, gaps exist using specific strategies to increase students’ autonomous regulations at schools (Guay, Ratelle, & Chanal, 2008). Additionally, gaps exist in research with students with EBD at the high school level, specifically with special populations, on how to promote autonomy and competence rather than using external motivators to increase competency and skills. Factors that can contribute to successful transitions to positive adult and post-secondary outcomes are social skill training, problem-solving training and relationship building (Field & Hoffman, 2012). High school education places a strong emphasis primarily academic curriculum. However, students with EBD require emotional and behavioral strategies that build competency in self-regulation. According to Wehmeyer (2003), students with disabilities are less self-determined than their peers. Students with EBD can learn necessary skills of self-determination when the skills are taught at any level of education. Practitioners must be equipped to identify lagging skills in a student and teach
problem-solving skills and appropriate strategies to handle stressful events. The educational environment is a prime social environment for developing a student’s self-determination skills.

**Definitions of Terms**

Autonomy – being self-initiating and self-regulating of one’s own actions (Deci et al., 1991).

Competence – involves understanding how to attain various external and internal outcomes and being efficacious in performing the requisite actions (Deci et al., 1991).

Emotional disturbance – a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a student’s educational performance: (a) an inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a generally pervasive mood of unhappiness or depression; or (e) a tendency to develop physical symptoms or fears associated with personal or school problems (NYSED, 2016).

External Regulation – behaviors are enacted to obtain a reward or avoid a punishment (Niemiec & Ryan, 2009).

Extrinsic Motivation – doing something because it leads to a separate outcome (Ryan & Deci, 2000).

Identified Regulation – behaviors that are enacted because they are considered valuable or important (Niemiec & Ryan, 2009).
IDEIA – Individuals with Disabilities Improvement Act of 2004 - The Individuals with Disabilities Education Act (IDEA) is reformed law ensuring services to children with disabilities throughout the nation. IDEA governs how states and public agencies provide early intervention, special education and related services to more than 6.5 million eligible infants, toddlers, children and youth with disabilities (http://idea.ed.gov/).

Integrated Regulation – identified regulations that have been synthesized with other aspects of self. As the most autonomous of external regulation, this most closely relates to a student behaving this way because of personal values and beliefs (Niemiec & Ryan, 2009).

Intrinsic Motivation – behaviors done in the absence of external impetus that are inherently interesting and enjoyable (Ryan & Deci, 2000).

Introjected Regulation – behaviors are enacted to satisfy internal contingencies or ego involvement. This relates to external motivation, where a student’s self-esteem is contingent on performance of a task. In other words, a student does not want to feel guilt for not doing something well enough (Niemiec & Ryan, 2009).

Learning Disability – a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which manifests itself in an imperfect ability to listen, think, speak, read, write, spell, or to do mathematical calculations (NYSED, 2016).

Other health impairment – having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that results in limited alertness with respect to the educational environment, that (a) is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder,
diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, sickle cell anemia, and Tourette syndrome; and (b) adversely affects a child’s educational performance (NYSED, 2016).

Relatedness – developing secure and satisfying connections with others in one’s social milieu (Deci et al., 1991); satisfaction of the need for relatedness facilitates the process of internalization; people tend to internalize and accept as their own the values and practices of those to whom they feel, or want to feel, connected, and from contexts in which they experience a sense of belonging (Niemiec & Ryan, 2009).

Response to Intervention (RtI) - A framework that implements a three-tier model approach to identifying and treating students with academic, behavioral and medical needs (Fletcher & Vaughn, 2009). Tier 1 is designed for all students and is provided to the general population. Tier 2 targets a smaller group of students who require extra help for a short period of time. Tier 3 services are intensive levels of support specifically designed to be delivered one-on-one (Brozo, 2009).

Self-determination – social, contextual conditions that support intrinsic motivation to satisfy basic psychological needs that support one’s feelings of competence, autonomy, and relatedness to maintain intrinsic motivation (Ryan & Deci, 2000). Self-determination is the repeated use of skills necessary to act on the environment to attain goals that satisfy self-defined needs and interests (Mithaug et al., 1998). Wehmeyer et al. (2000) believes people who are self-determined will regulate their own problem solving to attain their own goals.
Chapter Summary

Students with EBD lack social, emotional and behavioral skills necessary to navigate their school lives and transition into adulthood. High school students with EBD often have lagging skills that interfere with peers and can also create challenges in the academic setting. Lagging skills can be taught at any level of schooling when the appropriate skills are diagnosed. Autonomy, competence and relatedness are three factors that drive intrinsic motivation for a student to want to do well. By diagnosing skills lacking, and teaching the CPS strategy at the Tier 2 level of intervention, students can increase competency in problem solving skills and peer relations.

Chapter 2 provides a summary of the literature on students with emotional and behavioral disorders, the self-determination theory, and Response to Intervention. Chapter 3 describes the research question, population and sample, data collection and analysis procedures used in this study. Chapter 4 provide the results of the study and Chapter 5 provides a discussion of the study.
Chapter 2: Review of the Literature

Introduction and Purpose

Based on empirical articles found and selected, this section will focus on a summary of specific studies on diagnosing self-determination skills that are lacking and on strategies used to teach the appropriate self-determination skills. There is qualitative evidence on strategies implemented that discuss lacking skills of the student. Studies focus on the three main topics of self-determination, emotional and behavioral disorders, and RtI. However, evidence seems to lack in studies to determine whether strategies are implemented with fidelity.

Three different subjects are used while examining these topics. Self-determination was recognized as a theory in 1984, and has since gained several instruments used with reliability and validity in studies in accordance to the theory (Ryan & Deci, 2000). Students with EBD has been a classification since the beginning of special education in 1975 (http://idea.ed.gov). RtI has been a recommended framework that schools utilized since the reauthorization of Individuals with Disabilities Education Improvement Act (IDEIA) in 2004 (Hawken, Vincent, & Schumann, 2008). There are gaps in research when examining students with EBD that already lack self-determination skills and attitudes that are essential for successful school completion and transitions to adulthood (Carter et al., 2011). Because RtI is implemented as a framework adopted by schools, there is evidence that suggests that at the Tier 2 or Tier 3 level, RtI is labor-intensive and requires more training and resources to implement (Yong & Cheney, 2013).
Students with EBD

Students with EBD demonstrate difficulty advocating for themselves and do not show persistence when engaged in high school (Wagner & Compton, 2001). High school students can show high levels of disengagement and dissatisfaction with school, which can lead to school failure and high levels of drop-out rates (Kauffman, Bruce, & Lloyd, 2012). To teach lacking skills to students, it is important to first identify what skills must be taught. Schools are the perfect location to diagnose and determine lacking skills because this is the area where students often demonstrate these competencies or lack thereof (Pierson et al., 2008). Niemiec and Ryan (2009), believe strategies for enhancing autonomy include providing choices and meaningful rationales for learning activities, acknowledging students’ feelings about those topics, and minimizing pressure and control. Strategies for enhancing competence include providing effectance-relevant, as opposed to norm-based evaluative, feedback and optimally challenging tasks. Strategies for enhancing relatedness include conveying warmth, caring, and respect to students. (p. 141)

Pierson et al. (2008) found the influence on social skills and opportunities for students within the self-determination context has not been adequately explored.

Students with EBD or at risk for EBD can show depressive symptoms particularly between 13-18 years of age (Montague, Enders, Dietz, Dixon, & Cavendish, 2008). Depressive symptoms can decrease self-concept and lead to poor academic outcomes. Monague et al. (2008) conducted a study on the correlation of low self-concept and depressive symptoms in students identified as at risk in kindergarten and first grade over a longitudinal study to the age of 13-15. Specific questions that the researchers were
looking to answer is if there is a relationship between students who show developmental traits that could put them at risk for being labeled EBD. They also looked to answer if teachers could predict the possibility of students developing depressive symptoms later in school based on the screening instrument they used. The study results suggest there is a strong relationship between depressive symptoms and self-concept. The study also showed that teachers were good predictors of students at risk for EBD and that the behaviors of being at risk continued through the schooling years (Montague, et al., 2008). The outcomes in this study are significant when looking at the predictability for problems that students with EBD demonstrate and that early interventions could possibly make an impact on the student’s trajectory.

When students are in the lower grades of elementary school, it is possible they show early signs of EBD and are considered “at risk.” Montague et al. (2008) used the Systematic Screening for Behavior Disorders (SSBD) to screen students for potentially being labeled EBD based on teacher predictions. In this longitudinal study, they later used data from the Children’s Depression Inventory, the Multidimensional Self-Concept Scale, the Behavior Assessment System for Children and two teacher rating scales (Montague et al., 2008). Based on an analysis of all these measures, the data was processed to form their findings of whether teachers can accurately predict students who are appearing at risk and if they get labeled.

In a quantitative study conducted by Cheney et al. (2009) a 2-year study was done on the method of “Check, Connect and Expect” on students who were declared “at risk” for severe behavior problems. Students were assigned to the study using the Systematic Screening for Behavior Disorders (SSBD) which is a three-stage screening instrument
(Cheney et al., 2009). Students selected for the study showed internalizing and externalizing behaviors based on the first part of the screening instrument. Stage 2 screening was based on teacher input. Stage 3 were students already identified as needing additional supports. In their three supports, students’ academic engagement time was measured. This strategy also required extra staff hired for supporting outcomes for students. All students had daily progress reports that were checked at the beginning and end of each day to see parent involvement. The specified adult also monitored a daily point chart and gave verbal praise when warranted or verbal feedback for misbehaviors (Cheney et al., 2009). The specified adult was also audited to check adherence to specific procedures and was found to have 70-100% accuracy. Sixty percent of the students were found to be successful with this program based on the criterion measure of maintaining 75% on their daily point charts for 8 weeks or more and completing 4 weeks of self-monitoring.

These students who are called graduates were considered successful and showing “normal” levels of behavior. This study can be considered an effective and efficient Tier 2 intervention for most students with behavior problems. Cheney used the Check, Connect and Expect strategy in two different studies (2008, 2009). He targets students with EBD and utilizes this strategy as a Tier 2 intervention. In the first study, he uses a daily report card to have specified students check in and check out daily, monitored by a paraprofessional. In the first study, he uses 127 students, and in the second he widens the scope with the same measure to randomize the student sample over 18 different schools (Cheney, Flower, & Templeton, 2008; Cheney et al., 2009). In the second randomized trial, he added a level of staff support to include check-in’s during the day and give
feedback to students for poor performance as well as verbal praise for positive behavior. Both times, he used the Systematic Screening for Behavior Disorders to identify students at risk (Cheney, Flower, & Templeton, 2008). In both studies, there were empirical findings of success when rated by teachers for student growth. One significance is in the second study: with more staff added, there seemed to be a higher level of student behavior improvement. This could be because RtI at the Tier 2 level requires intensive staff and resource support to be successful (Saeki & Quirk, 2015).

Cheney et al. (2008) utilized a metrics screening process to identify students at risk for serious emotional and behavioral disorders. Using the SSBD rating scale to identify students, the researchers selected 127 students at risk for developing serious emotional or behavioral disorder using the check, connect, and expect method with a paraprofessional. Students were only given positive feedback based on goals achieved daily, which is a converse method from his previous mentioned study. Sixty-seven percent of the students responded favorable to the intervention. The purpose of this study was to test methods and reliability for the use of check, connect, and expect as a Tier 2 intervention. Through this study, it was determined that student movement is still questionable based on RtI still being in its “infancy” (Cheney et al., 2008; Greshem, 2005). At the time of this study, RtI was a newer framework adopted in schools and RtI was not applied broadly to address the social domain for students with EBD (Cheney et al., 2008). Direct instruction to compensate for lagging skills was not present in this study. However, a paraprofessional was hired to implement the morning check-in’s, check the daily progress reports, visit the classroom periodically, and meet with the
students at the end of the day to check their daily point sheets. A student that received 75% on a point sheet was a positive outcome.

Students with EBD often have “lagging skills” that contribute to behaviors (Greene, 2011). When a student’s skills are lagging, that student’s behavior may not meet the expectations of the environment. Studies have been implemented to diagnose lacking skills in the self-determination theory perspective. Kelly and Shogren (2014) focused on on-task versus off-task behaviors in four high school students. Students were studied at the same time every day to measure the behavior. Specific targeted behaviors of each student consisted of avoidance, absences and missed classes, verbal and physical aggression due to poor social skills, and poor coping skills. The Self-Determination Learning Model of Instruction (SDLMI) was implemented with students in a quiet setting. All students demonstrated an increase in on-task behaviors after learning specific skills. Students and teachers also noted a decrease in off-task behaviors and were interested in using the SDLMI intervention in the future (Kelly & Shogren, 2014).

Greene et al. (2004) examined the use of the CPS behavioral model of intervention in 47 dysregulated children to prove that significant improvements occurred when the model of CPS was implemented with students and parents. The control group participated in a 7- to 16-week behavior management parent training program for the parent only, which consists of external motivators and top-down approaches. The parents became aware of causes of behavior, management techniques, implementing a contingency management plan, using time-out, how to handle the child in the community, and a report card. The variable group participated in CPS model over 10 weeks and participated in the treatment goals of behaviors that contribute to aggressive outbursts and
understand the cognitive domains that contribute to the outbursts, became aware of the basket strategy (later known as “plans”), recognized the impact of these choices on adult-child interactions, and became proficient at the CPS model to resolve disagreements and alleviate power struggles. Parents attended each session, while the therapist advised whether or not the child joined the session. A scale was used to rate behavior outbursts by the child at the end of treatment and four months’ post-treatment. Behaviors were significantly reduced for the group that learned the CPS method versus the parent training group of external modifications. Interestingly in the parent training group, behaviors of the child slightly increased at the four-month post-treatment assessment, while the CPS group child behaviors continued to decline (Greene et al., 2004).

Transitions can be challenging for students with EBD in school. Carter, Trainor, Owens, Sweden, and Sun (2010) conducted a study on students with EBD, learning disabilities and cognitive disabilities to evaluate their self-determination capacity. One hundred and ninety-six high school students were assessed using the AIR self-determination scale. The objective of this study was to determine what self-determination skills were lacking for transition-age students with disabilities. This study was part of a broader study being conducted on transition and community outcomes for students with disabilities. Teachers reported that students had several opportunities to engage in self-determined behaviors at school. Teachers, parents, and students were asked to assess the student in the AIR self-determination scale. Everyone assessed very differently. Students assessed themselves much higher than teachers did. Parents rated their child differently than the child did themselves or the teacher rated the child. Social skills and problem behaviors were also found to be strongly linked with student skills of self-determination.
(Carter et al., 2010). The finding of the significance of social skill opportunities in school furthers the research that school is a prime location to learn the lacking skills necessary to be self-determined. Solberg, Howard, Gresham and Carter (2012), examined 135 high school students with disabilities to question their views on the impact of learning self-determination skills toward their transitions for the future. Through path analysis, students participated in a series of assessments based on a system created by the Center on Education and Work at the University of Wisconsin-Madison (Solberg et al., 2012). Forty-five questions were used to address students’ involvements in, use of, and views regarding the education they received while in high school. They used several sub-tests soliciting information that included (a) quality learning experiences, (b) career search self-efficacy, (c) goal setting, (d) motivation to attend school, (e) academic self-efficacy, (f) career decision making difficulty, and (g) academic stress scale (Solberg, Howard, Gresham, & Carter, 2012).

Peer tutoring is a strategy used to enhance self-determination skills. According to Miller (1995) post-school outcomes are low for students with EBD. Specifically, only 37% had enrolled in a post-secondary school as compared to 68% of students without a disability (Miller, 1995). Peer support has shown effective with several groups struggling with issues such as obesity, drugs and alcohol. Miller discovered that peer tutoring could meet the needs of diverse populations in the public schools. A study was conducted to recruit and train 15 college students to work with high school students who are classified as EBD. Training curriculum was based on three major components of self-determination. Three phases of training were implemented to ensure fidelity. Peer tutors went into schools as teams to work with students. The peer tutors kept journals and were
observed by trainers to ensure the program was implemented correctly (Miller, 1995). The goal was to increase self-determination skills among high school students using peer tutoring.

Transitions into adulthood can be difficult for students with EBD more than any other disability (Seo, Wehmeyer, Palmer, & Little, 2015). Based on growing literature, promoting self-determination skills in-school has an impact on outcomes in adulthood (Wehmeyer, Palmer, Soukup, Garner, & Lawrence, 2007). Seo et al. (2015), conducted a study using two groups of students from disability categories of students with EBD and students with learning disabilities. Self-determination skills, based on four characteristics – (a) autonomy, (b) self-regulation, (c) psychological empowerment, and (d) self-realization – are the same between both groups. Autonomy creates opportunities to act on one’s own values and beliefs. When a student has EBD, these actions can be volatile and impulsive, without any regard for future implications (Thuen & Bru, 2009). Students with EBD can be placed in alternative settings due to poor choices and lacking skills to navigate the environment. School completion can be shockingly low; for example Aud et al. (2010) found that only 43.4% of students with EBD completed school.

Little research has been done on students with EBD after their transition into post-secondary opportunities according to Carter, et al. (2010). Zigmond (2006) conducted a study of 33 students with severe EBD that transitioned 3, 6, 12, 18, and 24 months after their formal schooling ended. Over 100 students were chosen at Grades 9-12 at the beginning of a 5-year study. At the end of 3 years, 97 students had left school, 57 graduated and 40 dropped out. After trying to locate all 97 students, only 33 could be found for interviews for data. At the three-month data collection point, 15 out of 33 were
working full or part time. At the 24-month time, 20 out of the 33 were employed. At the 24-month period, 40% of the former students were involved in a post-secondary training or education program. Of the most significant finding is that through the data collection points, former students were found to have inconsistent life paths by being in and out of work, and changing jobs regularly. The data suggests the students are not staying employed for long periods of time. This could be problematic due to lagging skills never learned, or relatedness not able to be achieved.

**Self-Determination**

Self-determination skills are known to be developed at an early age of development according to Shogren and Turnbull (2006). Self-determination skills allow the child to acquire knowledge about themselves and the world around them (Pierson et al., 2008). Having strong self-determination skills can have a substantial impact on transition and adulthood for the student (Ryan & Deci, 2000; Pierson et al., 2008). Schools are a prime social setting to teach lagging skills to students to ensure a more favorable outcome for transition opportunities.

The need for autonomy, competence and relatedness has been studied through different viewpoints. Flunger, Pretsch, Schmitt and Ludwig (2013), studied the need for intrinsic motivation based on studying eighth and ninth graders based on a five-point Likert-type scale ranging from 1-5. Qualities of self-determination were broken down and measured. Katz, Kaplan and Gueta (2009) explain that self-determination occurs when students are granted choices; competence requires specific skills attained prior to a lesson; and social relatedness occurs when a person feels accepted by the teacher. The study was given in contexts of specific academic classes and social situations. The scale
used specific language such as “joy” and boredom.” Specific measures were based on satisfaction versus dissatisfaction. Findings were that the need for autonomy, competence and relatedness are high. According to Ryan & Deci (2000) and Flunger et al. (2013), positive consequences of need satisfaction are self-reported, although they play only a minor role in predicting outcomes.

Black and Leake (2011) looked at teachers own self reports on the self-determination theory and how it influences their own attitudes and teaching in the classroom. Through this qualitative analysis of beliefs around what self-determination is and how it shapes attitudes through experiences and values, the research showed that connectedness came out as a common theme. All groups also showed high correlation between instability in family history contributing to lack of control, or autonomy. Teachers did not view students as possessing self-determination skills. According to Field, Martin, Miller, Ward and Wehmeyer (1998), to be self-determined, students must act in a self-determined way with attitudes, skills and knowledge to create realistic and achievable goals based on their own understanding of strengths and challenges and implemented with persistence and flexibility. Black and Leake (2011) suggest using social capital to teach higher self-determinant skills as a result of the study. Findings in this study were that teachers expected students to possess the attitudes, skills and knowledge to be self-determined, and the teacher would build those skills to further self-determination. In both studies, teacher’s views and attitudes were examined in relation to self-determination toward themselves and how it contributed to student autonomy and relatedness.
Students who view their educational environment as less supportive were at greater risk for motivational, behavioral and psychological problems (Van Ryzin, 2011). Van Ryzin (2011) has noted that the self-determination theory has been studied extensively to look at negative outcomes, and the research has generally looked at GPAs. There is a gap in research on applying the self-determination theory or teaching skills to students with EDB who already lack specified skills. When considering student perception, students with EBD have limited capacity for self-determination (Carter, Lane, Crnobori, Bruhn, & Oakes, 2011). Yong and Cheney (2013) looked at school systems or programs that have adopted the framework of RtI that could use small-group settings in Tier 2 to teach skill deficits in a social and emotional capacity. Tier 2 interventions are implemented to reduce risk factors and enhance skills for students at risk or classified as EBD.

Skinner and Belmont (1993) conducted a quantitative study about teacher’s behavior to provide autonomy support and structure in 144 children Grades 3-5. They studied the relationship of students and fourteen teachers over a year to determine if teacher involvement contributed to student’s motivation by providing autonomy and structure. The researchers suggested that students who were engaged had more positive remarks from teacher responses than students who were disengaged. Teacher and parent perspectives were relied upon when determining lacking skills and attitudes toward deficits. Teacher context was used throughout the study to investigate parallels with the teacher and student attitudes toward themselves and each other using a four-point answer format. Teachers and students agreed that the teacher report of involvement was correlated. Students reported that teacher involvement was the highest context of all three
factors. Student reports that emotional engagement was mostly related to teacher perceptions of behaviors rather than emotions. Conversely, students reported low student engagement when relatedness was lacking within their perception. Thus, the research found that teacher behavior influences students’ perceptions of their interactions. One of the outcomes of the teacher’s views was that a student needed to be connected to their teacher (Black & Leake, 2011). Skinner and Belmont (1993) found that a poor student teacher relationship created poor outcomes which undermined student motivation and created behavior disengagement.

Teacher praise and the effect on the student is a factor that can contribute to relatedness in self-determination. Sutherland and Wehby (2001) conducted a study on how teacher praise in the classroom influences instruction and behavior for students with EBD. Twenty teachers in Grades K-8 volunteered to participate in this study where there were two groups. One group was the self-evaluators and the other group was the no-treatment group. Teachers were observed for a total of five hours in self-contained classrooms that had no more than a mean average of 10.8 total students in the class. Three individuals were trained over a 6-week period to collect data during the observations. The results were that teachers in the self-evaluation group increased their awareness of their own praise. Praise increased significantly before and during the self-evaluation time. Desired teaching behavior also increased. (Sutherland & Wehby, 2001). These results could be linked with approval and disapproval. Student approval could have a positive effect on student relatedness in the classroom.

Teachers could determine whether feedback is given to students through praise or directives that could lead to student achievement in the classroom. Sutherland and Wehby
(2001) conducted a study where teachers in the classroom were videotaped and observed. The observers were trained for approximately 6 weeks using video. In situ training was conducted over 4 weeks. Data collected was compared to achieve .80 agreements in their findings. This method is called the Multiple Option Observation System for Experimental Studies (MOOSES). This system allowed for an observation system that simultaneously collects data, discreet evidence, and general measures for a specified amount of time (Sutherland & Wehby, 2001).

Seo et al. (2015) conducted a study to determine the difference among students with EBD and learning disabilities to determine if self-determination skills and behaviors are different among these two groups. The results indicated that students with EBD resulted in lower levels of autonomy (Seo et al., 2015). The ARC’s self-determination scale was used to determine what similarities and differences were present between the two groups. This measure has a high degree of reliability when used in global self-determination. Five hundred students were sampled and the measure was at a fourth-grade reading level so students could answer the questions independently. The screening instrument was based on four categories of autonomy, self-regulation, psychological empowerment and self-realization. Results showed that there was little to no discrepancy between factors in self-determination except for autonomy (Seo et al., 2015). Students with EBD could have lower autonomy and confidence in self-determination skills due to less desired behavioral experiences.

Although data in some studies demonstrated evidence of skill deficits and taught students’ specific strategies in the above referenced empirical articles, some implemented specific strategies without looking at skill deficits. Eisenman, Pell, Poudel and Pleet-Odle
(2015) studied experiences of self-determination through a 5-year case study. The researchers found self-determination interventions are challenging for students with disabilities in a general education setting because learning opportunities are less frequent and must be embedded in the educational setting. Over a 5-year time, a learning support coach (LSC) was hired to provide smaller group instruction on students identified as struggling with organization, individual goals, academic progress, and to organize for upcoming tests and assignments.

Throughout the day, the LSC would go in and out of classrooms to offer support to any student that showed signs of struggling with academic content. In addition, the LSC would also provide small group instruction for a student to complete work or offer individual test accommodations. Within the five-year period, the school added eight LSCs along with three para educators. This all-inclusive high school taught a career and transition course to all ninth graders where they focused on skills for success such as communication, financial literacy, team building and problem solving (Eisenman et al., 2015). Based on skill deficits, students received specific structures that allowed for autonomy. Second, caring adults were supportive of students needs to enhance relationships. Third, students received support in executive functioning to increase competence (Eiesenman et. al., 2015). With increased supports, a school system could implement specific supports such as a LSC to compensate for skill deficits to increase competence and relatedness, which leads to more choices, or autonomy, which leads to greater student satisfaction.

Additionally, Solberg, Howard, Gresham and Carter (2012) looked at students in special education in high school and where they are highly engaged in setting goals and
self-efficacy. Assessments were completed online so that students could identify what learning experiences contributed to their career preparation and goal setting. Through path-analysis, sample students were studied for career readiness. Through connecting pathways to analysis of career readiness, it was determined that self-determination skills play an important role in the transition process (Solberg et al., 2012). Based on this study, students who experienced school-based learning and practical work placements allowed for competency, which contributed to higher self-determination during transition outcomes and career readiness. Students with EBD can experience difficult transitions and can lack the skills necessary for success in post-secondary outcomes. Zigmond (2006), utilized a mixed method study to look at students who finished their formal education to see what their post-school outcomes were. Interviews were conducted and coded using the chi-square analyses. Measures were taken at 3, 6, 12, 18, and 24 months out of school and data was analyzed. Students with EBD experience a higher drop-out rate than their non-disabled peers by as much as 43% to 61% (U.S. Department of Education, 2016). One indicator that keeps students motivated in school is vocational and career planning preparation (Carter et al., 2006). Kelly and Shogren (2014) completed a qualitative study based on four high school students who are classified as EBD and were taught the Self-Determination Learning Model of Instruction (SDLMI). The model includes key skills such as self-regulated problem solving processes and can be incorporated in student’s behavioral goals. On-task behavior was the dependent variable as it is highly relevant in the classroom setting (Kelly & Shogren, 2014). Fidelity was achieved through an independent observer with a checklist for instructional objectives.
Students who demonstrate disruptive behavior are often sent out of class, which further adds to skill deficits. Over the long term, these disruptions can lead to school drop-out (Van Ryzin, 2011). Based on Thompson’s (2014) research of the Self-Management Training and Regulation Strategy (STARS), the research points out the program that targeted autonomy support, social competencies and relationships are important for school success. Students in fourth and fifth grade completed a pre- and posttest based on social competency, authority acceptance, and disruptive behavior and student-teacher relations. Student autonomy came out lowest in student perceptions. Authority acceptance was higher during the posttest. Social competence was also noted as higher at posttest. Special education students scored .040 lower on teacher ratings at posttest for behavior (Thompson, 2014). There was a 17.7% increase improvement in classroom behavior based on the average student in the study, 18.1% improvement in authority acceptance, 20.8% improvement for social competence, and 15.2% improvement in student-teacher relations. Self-management was a high indicator for competence and students suggested they would recommend it to others. Based on improvements in data, it could be concluded that teacher behavior toward students influences the way students perceive their environment. The Self-Management Training and Regulation Strategy (STARS) is a strategy used with randomized design on 60 students in 23 classrooms to identify the type of disruptive behaviors (Thompson, 2014). Pre- and posttests were issued to students and teachers to identify disruptive behavior, authority acceptance, social competency and student teacher relations. Nine scripted lessons were taught to the randomized students for 20-25 minutes per week for 6 weeks during the self-monitoring phase of the trial (Thompson, 2014). One limitation is that the
study was not blind. There were also only two testing points. Future research could include a longitudinal study over an entire school year or several years.

Ryan and Connell (1989) used a self-regulation Questionnaire (version for students with LD) on 355 elementary students between Grades 3-6 in a suburban elementary school. Students received “why” questions followed by a list of reasons. The reasons were rated on a four-point scale from a 4-1. The pattern of correlates was scored to show different types of internal motivation such as introjected, identified, or intrinsic motivation. This measure became extensively tested and normed referenced.

Two studies that produced valid and empirically sound evidence were by Pierson et al. (2008), and Seo et al. (2015), where they used measures of the AIR self-determination scale and the ARC’s self-determination scale. Both measures have been used historically to produce reliability among several sub-groups. Both researching groups used these measures to compare students with EBD and learning disabilities. Both measures were given to students to self-report based on a Likert-type rating scale. Social skills were found to be significant and substantially lacking when examining factors that related to competency and autonomy (Pierson et al., 2008; Seo et al., 2015). Poor behavioral choices and experiences could lead to fewer opportunities to diminish autonomy (Seo et al., 2015). Both models were used to diagnose what self-determined attitudes were lacking in students.

**Response to Intervention (RtI)**

Schools that implement RtI could utilize character development interventions as a school-wide initiative. When determining a student with EBD’s capacity for self-determination, it is first important to find what skills or behaviors are lacking. Oakes et
al. (2012) studied a program that focused on goal setting, decision making, and self-management skills to improve academic performance and motivation for this small group of at-risk students. Nine fourth grade students were studied and identified as underperforming academically and struggling behaviorally. The students were screened using the Student Risk Screening Scale (SSRS), which measures for conduct issues and anti-social behavior, and AIMSweb was used to benchmark and monitor progress based on academic gains. The Positive Action Curriculum was chosen by the research team to be implemented. This curriculum focuses on self-concept, physical and intellectual positive actions for a healthy self, managing self-using social and emotional skills, getting along with others, being honest with self, improving self, and positive action review. Specific lessons within the units were revised or combined. The purpose of this study was to implement the procedure with integrity, to measure what teachers and students thought of the intervention, and if this intervention increased students’ overall functioning within skill sets and increased their motivation (Oakes et al., 2012). A series of lessons were given to nine fourth grade students. Integrity was measured by direct observation from an outsider and the teacher, self-assessment by the teacher, and a school wide evaluation tool.

The instructional level validity was high, but there is still the question of whether the students were internalizing the lessons. There were 21 lessons taught and nine were modified or revised to maximize content delivery (Oakes et al., 2012). One major implication with this study is that lessons were modified or reduced due to time constraints. Students were also pulled from class to learn these lessons. With the increasing demands of instructional time in the classroom, it could be difficult to
implement a Tier 2 support with fidelity based on time and staff support necessary. Learning specific academic skills to self-advocate can also increase self-determination skills around a student feeling competent, which can contribute to better behavior in school.

Carlino and Mustian (2013) completed a mixed methods study on middle school students in a non-public day school. All students fell below grade level around writing competency. The mean level of performance in writing skills was a 4.7 grade level. Teachers were trained in three sessions on the Self-Regulated Strategy Development (SRSD) model of instruction. Once students learned techniques that addressed skill deficits, performance increased in planning and implementing writing assignments. The self-determination skills were embedded in the curriculum and questioning. Students and teachers were both interviewed after the study and agreed that there were gains in self-determination and skills achieved. Tier 2 supports are necessary for student growth and development in the social and emotional area just as much as academics are. To develop student autonomy, relatedness and competency, Tier 2 supports could be used to teach lacking skills that could increase competency. Writing skills are used to self-advocate in all areas of life. Carlino and Mustian (2013) use a Self-Regulated Strategy Development (SSRD) with a middle school population of students who are lacking skills and diagnosed as EBD. The focus was on teaching strategies through writing skills to teach self-determination and goal setting. A 22-item criterion-reference measure was modified and administered to students. Teachers reported an increase of skills with this method. Students were asked to answer questions based on self-determination. Students reported they felt more confident in their writing.
Chapter Summary

Students with EBD have difficulty in the traditional school system due to lacking skills in self-determination. Studies show that students also struggle with transitions in school and into the community. Several interventions have been introduced in schools that provide students with ways to increase self-determination skills, yet many studies still lack fidelity because it is challenging to attribute a skill changing due to one factor. As RtI is a federally mandated framework that schools have adopted, studies have been done on some methods, but still find that resources, personnel and training need to increase. Self-determination skills among students have been studied using several different instruments; however gaps in research still exist with students with EBD and the self-determination theory.

Chapter 3 provides the research question, population and sample, data collection and analysis procedures used in this study.
Chapter 3: Research Design Methodology

Introduction

Students with EBD lack problem-solving skills and interpersonal skills which can interfere with academic performance and peer relations in their formative years of school. Students need strategies taught to gain autonomy, competency and relatedness in the high school environment to compensate for skill deficits. By learning collaborative and proactive solutions (CPS), a student with EBD could gain skills to increase autonomy, competence and relatedness for increased intrinsic motivation. According to Greene et al. (2004), students who learn CPS have significant improvements in behavioral skills and functioning. The social environment can facilitate self-determined forms of motivation. Ryan and Niemiec (2009) believe social contexts affect people’s experiences and their satisfaction of basic psychological needs and the self-determination theory looks at causes, reasons, and sources of human motivation on how people gain meaning, reactions, and cognitions for internal motivation. Additionally, they believe that teachers cannot control learning, but can influence a student’s behavior and motivation by influencing how they interpret or experience material through interpersonal connection and interactions that impact the student’s motives, values and goals (Ryan & Niemiec, 2009). This theory provides a framework of a starting point for understanding motivations and behaviors that lead to competency and support autonomy.

This convergent parallel mixed method study employed a quasi-experimental design with an investigation of utilizing the Self-Regulation Questionnaire (version for
students with LD). The study focused on analyzing existing data from a pre- and post-assessment of students to determine if student autonomy increased and qualitatively focused on the educator’s and mental health practitioner’s perspective on challenges encountered while implementing the CPS model. Data was analyzed separately to confirm or disconfirm the findings (Mertens & Wilson, 2012). Campbell and Fiske (1959) believe a psychological trait, such as autonomy, could be best understood by gathering different forms of data (Creswell, 2014).

**Research Context**

The research study took place in a special education high school in a suburban town in upstate New York that serves students with significant behavior issues that impede daily functioning in a general education placement. Students are referred to this school by their home school district’s committee on special education to receive their education in a small, supportive environment that can address social and emotional functioning while delivering academics. Staff is comprised of one principal, two assistant principals, 20 teachers, 7 mental health clinicians, and 30 paraprofessionals. Administration and professional staff are certified through New York State. The student to teacher ratio in classrooms is 6:1:1. The number of students who attend this school ranges from 98-102 and the student ages range from 14-19 years old. All students placed in this program qualify for comprehensive special education services; the majority of students in this school are coded with the primary disability label of emotional and behavioral disorder (EBD) or other health impaired (OHI); 7% of students have an educational label of learning disability (LD), and 12% have a code of autism. The remaining 5% of the students have varying disability labels of intellectually disabled,
hearing impaired and multiple disabilities and learning disabilities. Profiles of the students include multiple mental health diagnosis and have social/emotional/behavioral support needs. All students who attend this school receive mental health counseling.

**Research Participants**

All students in the building participated in the Self-Regulation Questionnaire (version for students with LD) for a pre-assessment and post-assessment (Ryan & Connell, 1989). For this study, the Self-Regulation Questionnaire was chosen from 30 students who participated in the pre- and post-questionnaire process. Additionally, 10 students out of this group participated in the Tier 2 intervention of the CPS strategy based on a high amount of daily, repeated discipline referrals. Teachers and mental health practitioners of the school building were purposely selected based on involvement of students participating in the Tier 2 CPS method. Focus group interviews took place to explain experiences of the CPS method implemented to determine if a student increased competency, autonomy or relatedness through collaboration, and to discuss what challenges occurred during implementation. Interviews occurred at the end of the school year after CPS was implemented. Consent was not required in this study for students participating in the pre- and post-assessment because all students took the Self-Regulation Questionnaire (version for students with LD) as part of pre-existing data within the program. A letter was sent home notifying parents and guardians that students are involved in a study of data collection, where students were not identified. Additionally, the educators and mental health staff members signed informed consent stating they are participating in a research study. The researcher filed an expedited
application approved by the St. John Fisher Institutional Review Board. No 
reimbursement or gifts were given for this study.

Mental health practitioners were trained in CPS over the past two years varying 
from a week-long seminar to a one-day seminar, and continue to consult with the trainer 
monthly throughout the school year. Years of experience practicing in this setting vary 
from 2 months to 22 years, as indicated in Table 3.1.

Table 3.1

Summary of Mental Health Practitioners Participating in Study

<table>
<thead>
<tr>
<th>Mental Health Practitioner</th>
<th>Gender</th>
<th>Certification</th>
<th>Years practicing total</th>
<th>Years practicing in this setting</th>
<th>Training in CPS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>M</td>
<td>School Psychologist</td>
<td>25</td>
<td>22</td>
<td>1 week seminar</td>
</tr>
<tr>
<td>2</td>
<td>M</td>
<td>School Social Worker</td>
<td>23</td>
<td>16</td>
<td>1 week seminar</td>
</tr>
<tr>
<td>3</td>
<td>F</td>
<td>School Psychologist</td>
<td>4.5</td>
<td>3</td>
<td>1 week seminar</td>
</tr>
<tr>
<td>4</td>
<td>M</td>
<td>School Social Worker</td>
<td>20</td>
<td>15</td>
<td>1 day seminar</td>
</tr>
<tr>
<td>5</td>
<td>F</td>
<td>School Psychologist</td>
<td>5</td>
<td>3</td>
<td>1 week seminar</td>
</tr>
<tr>
<td>6</td>
<td>F</td>
<td>School Social Worker</td>
<td>12</td>
<td>2 months</td>
<td>Self-directed learning</td>
</tr>
</tbody>
</table>

Although teachers in the study were not trained in CPS at the time of the study, 
they participated in the collaborative process by having a common student with the
trained mental health practitioner. Teachers were selected for the focus group based on this criterion. All teachers are dually certified in special education and specific content they are teaching. Years of experience varied from 2 years to 17 years in the setting, as indicated in Table 3.2.

Table 3.2

Summary of Teachers Participating in Study

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Gender</th>
<th>Certification</th>
<th>Years teaching total</th>
<th>Years teaching in this setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Male</td>
<td>Social Studies</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Female</td>
<td>Math</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Male</td>
<td>Social Studies</td>
<td>7.5</td>
<td>3</td>
</tr>
<tr>
<td>D</td>
<td>Male</td>
<td>Social Studies</td>
<td>40</td>
<td>17</td>
</tr>
<tr>
<td>E</td>
<td>Female</td>
<td>Earth Science</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>F</td>
<td>Male</td>
<td>Biology</td>
<td>9</td>
<td>8</td>
</tr>
</tbody>
</table>

*Note:* All teachers are dually certified in special education.

**Instruments Used in Data Collection**

The Self-Regulation Questionnaire (version for students with LD) was designed for students in elementary or middle school to focus on motivation to participate in school related activities. It is comprised of four specific subscales that measure motivation. The sub-scales are: external regulation, introjected regulation, identified regulation, and intrinsic motivation. The questionnaire asks questions to a degree of what
reasons are true. For example, a stem question is asked and followed by several reasons: I do my homework so the teacher won’t yell at me; responses for each reason range from always, most of the time, sometimes, never. Scoring the questionnaire is based on calculating the subscale scored; always is scored 4, most of the time is scored 3, sometimes is scored 2, and never is scored 1. All sub-scores were calculated to combine the subscales with the Relative Autonomy Index (RAI) score by using the formula of 2 X Intrinsic + Identified – Introjected – 2 X External. Controlled subscales are weighted negatively, and the autonomous subscales are weighted positively. The more controlled the regulatory style represented by a subscale, the larger its negative weight; and the more autonomous the regulatory style represented by a subscale, the larger its positive weight. Refer to Appendix A for clarification on scoring. Some students did the assessment as a paper and pencil task while others completed the assessment on the computer. The mental health team scored the assessments and entered data into an Excel spreadsheet. The data was given to the researcher to analyze.

Because of the small sample size of the control group, the researcher chose to analyze the pre- and post-data of the questionnaires to see if the autonomous regulation style increased because of the CPS process being implemented. A paired sample t-test was also used to find if there is statistical significance with the assessment results. Data was calculated separately, and then combined with the pre-intervention data and post-intervention data. Additionally, the results were compared with the data from the qualitative results of the focus group interviews of the implementation of the CPS method.
The CPS model is based on the premise that “kids will do well if they can,” (www.livesinthebalance.org, 2016). The model is based on the idea that students have lagging skills in generalized areas of (a) executive skills, (b) language processing/communication skills, (c) emotion regulation skills, (d) cognitive flexibility skills and (e) social skills (Greene, 2016). Lagging skills hinder the student from performing well in school. According to Greene (2016), a student will be more motivated to do well in school by developing these skills. Collaborative and proactive solutions (CPS) is a cognitive-behavioral model that practitioners and students use to collaboratively identify a problem area and come up with possible solutions. CPS is a three-plan model which should be worked on proactively by the school team and the student when the student is not in crisis or demonstrating the lagging skill. The first step of this model is to identify what skills are lagging. The student may identify challenges getting started with classwork, or transitioning in the hallways, or getting along with a peer. This initial step of problem identification is called the Assessment of Lagging Skills and Unsolved Problems (ALSUP). This step is meant to be implemented as a discussion with the student involved. The lagging skill is considered an “unsolved problem.”

The next phase of the CPS method is broken into a three-plan framework. Plan A is a problem solved by the adult unilaterally such as a reward and punishment system. Token economy systems are extrinsic motivators that do not have long-term effectiveness (Guay, Ratelle, & Chanal, 2008). Plan B involves the staff member and the student collaborating on three steps: (a) the empathy step: the adult gathers information from the student to get a clear understanding of the student’s perspective; (b) defining the problem: the adult expresses their concern over the unsolved problem; and (c) the
invitation step: the student and adult brainstorm and identify satisfactory solutions that are acceptable in the school climate. Plan C involves prioritizing some unsolved problems to a lower rank, or putting them into a “holding pen.” By allowing for Plan C, the student and adult are less likely to become overwhelmed with too many unsolved problems. The next step of the CPS process is to plan and implement Plan B. Conversations with the adult and the student will focus on what the student can do to solve their lagging skill of plan B. Additionally, conversations occur with the team and the student to reflect on the problem-solving process to reflect on choices made during the implementation of the solution. Data from other sources such as the Self-Regulation Questionnaire (version for students with LD), or school referrals, were used to assist in problem solving. The assessment is meant to be used during counseling at a time when the student and counselor can talk through the possible skill difficulties. Examples of some specific questions are “what are you getting in trouble for? Why are people getting on your case?” These questions allow the mental health practitioner to hone specific skills that are lagging through further inquiry of the student. The CPS process can be time consuming as plan exploration conversations can take more than one counseling session.

Open-ended focus group interviews were conducted with mental health practitioners and teachers through purposeful selection based on the staff members’ training and participation in the CPS model. Teachers and mental health providers were selected based on the commonality of a student who participated in the CPS model. Interviews lasted approximately 45 minutes to one hour. Structured interview questions were piloted by asking an exiting administrator who attended the trainings for CPS, but took a position in another school district prior to the implementation of this study. All
focus group interviews were conducted in a private meeting room with the staff members and researcher. The date and place of data collection were recorded. A tape recorder was used while the interviewer took hand notes. Data collection was hand-coded and analyzed for emerging themes and categories using a deductive approach. Refer to Appendix B for specific questions.

**Procedures for Data Analysis**

The researcher analyzed the CPS model being implemented through focus group interviews with mental health practitioners and teachers. Specific questions were asked related to the training, implementation, and barriers of CPS. Perceptions and barriers of this strategy were studied for program effectiveness through focus group interviews with purposeful selection of educators and mental health providers. Advantages of this method include a general sense of the group’s feelings toward the implementation of this strategy. These interviews are also time efficient.

The researcher explored themes that emerged for possible common evidence of the strategy being implemented by analyzing each question separately among the group, then combining the mental health and teacher data together to analyze. The interviews were coded for common themes and implications and recommendations for future research.

Additional quantitative research focused on a non-equivalent control group design of students labeled with EBD taking a pre-questionnaire, a strategy being implemented, and taking a post-questionnaire. Data was analyzed with the non-control group to compare the individual results of implementation of both tests. Results of the tests are included in tables. A paired sample $t$-test was also run to determine if there is statistical
significance with this method. This quantitative method attempted to analyze if there is evidence from implementing the CPS strategy that students improved autonomy, competence or relatedness.

By using the quantitative data from the Self-Regulation Questionnaire (version for students with LD) and qualitative information from interviews, the researcher used the data to analyze separately, and then combined to confirm or disconfirm each other. Data is reported in Chapter 4 by explaining how themes were coded, categorized and sub-categorized.

The self-determination theory is nested in quantitative theories; however, Ryan and Neimiec (2009) also believe that there are some general truths about human nature that can be demonstrated and observed through qualitative measures. The Self-Regulation Questionnaire “represents a framework for making testable predictions about which aspects of a given social context will enhance versus undermine self-motivation, integrated functioning and social relatedness” (Ryan & Niemiec, 2009, p. 269). By using the Self-Regulation Questionnaire (version for students with LD), the researcher attempts to find a measure to apply whether CPS is effective in increasing student skills related to problem solving.

**Summary**

Students with EBD lack social skills and problem solving skills to effectively navigate the high school environment. CPS is a strategy that was used to allow students to solve problems they were having in the high school environment while learning appropriate skills. The Self-Regulation Questionnaire (version for students with LD) is a measure used to determine what types of motivation and regulatory styles students have
while experiencing different academic demands. According to Connell and Wellborn (1990), students who are intrinsically motivated to do schoolwork and have developed more autonomous regulatory styles are more likely to achieve, and be more well-adjusted than students with less self-determined types of motivation. The researcher attempted to determine if implementing CPS lead to increased competency of the student, and if the implementation of CPS lead to an increased understanding of the student by the staff member.

Quantitative data collection consisted of pre- and post-assessment data from the Self-Regulation Questionnaire (version for students with LD) administered to all students in a specialized high school program. A sampling of 10 students were chosen to have results of the pre-assessment of Self-Regulation Questionnaire (version for students with LD) compared to the post-assessment data after the method as a Tier 2 intervention occurred. Pre-existing data was given to the researcher at the end of the school year.

Qualitative data was collected through focus group interviews with educators and mental health practitioners collaborating with students using the CPS method. Clusters of meaning were coded and analyzed from specific themes that emerged. Qualitative data consisted of experiences of practitioners and added a richness to data collection to exemplify autonomy, competence and relatedness of the student, and the actual implementation of a strategy in the school building. Chapter 4 presents the results of the research described above.
Chapter 4: Results

Research Questions

Students with EBD often lack skills that can interfere with development of self-determination. Deficits in skills relating to autonomy, competence or relatedness can result in problems in schooling and lead to poor relationships, poor grades, and possibly dropout of school or problems with the criminal justice system. The school system is the perfect location to identify these lagging skills and teach skills and strategies for problem solving, relationship building and choice making.

This mixed methods study took place in a special education high school in a suburban town in upstate New York that serves students with significant behavior issues. Students are referred to this school by their home school district’s Committee on Special Education to receive their education in a small, supportive environment that can address social and emotional functioning while delivering academics. Students in the building participated in the Self-Regulation Questionnaire at the beginning of the year, and again at the end of the year. Thirty students’ results were chosen for analysis, including ten students who received the collaborative and proactive solutions (CPS) strategy. Separate focus groups were conducted with six mental health staff members and six teachers that implemented CPS with students.

The chapter is organized around three specific research questions posed in Chapter 1. The research questions are:
1. Is there evidence from implementing the CPS strategy that students improve autonomy, competence or relatedness?

2. What are the successes and challenges encountered when implementing CPS?

3. What are the teacher’s and mental health practitioner’s perspectives on implementing CPS in a special education high school setting?

One hundred students in a high school, center-based special education program with a ratio of six students, one teacher and one paraprofessional participated in the Self-Regulation Questionnaire at the beginning of the year. Out of the 100 students, 30 students completed the Self-Regulation Questionnaire at the end of the year. Ten students completed the CPS strategy with mental health staff, two students were in the process of participating in the strategy, and one student dropped out of school. Additionally, six mental health professionals and six teachers participated in the focus group interviews.

**Data Analysis and Findings**

To answer question 1 – if there is evidence from implementing the CPS strategy that students improve autonomy, competence or relatedness – the Self-Regulation Questionnaire (version for students with LD) was administered to 100 students in the program at the beginning of the year. The Self-Regulation Questionnaire (version for students with LD) is designed for students in elementary or middle school to focus on motivation to participate in school-related activities. It is comprised of four specific subscales that measure motivation. The sub-scales are: external regulation, introjected regulation, identified regulation, and intrinsic motivation. Controlled subscales are weighted negatively, and the autonomous subscales are weighted positively. The more controlled the regulatory style represented by a subscale, the larger its negative weight;
and the more autonomous the regulatory style represented by a subscale, the larger its positive weight.

A paired sample \( t \)-test was calculated to compare the mean pretest score to the mean posttest score of ten individuals that participated in both administrations of the Self-Determination Questionnaire (version for students with LD) and participated in the CPS strategy. The mean on the pretest was \(-0.5777 (sd = 1.82)\), and the mean on the posttest was \(0.3015 (sd = 2.26)\). No significant difference from the pretest to the posttest was found \((t (12) = -2.145, p > .05)\). This data alone is inconclusive to determine if the Self-Regulation Questionnaire is an effective tool to measure the CPS strategy. See Appendix C for pre- and post-data.

To answer question 2 – what are the successes and challenges encountered when implementing CPS? – and question 3 – what are the teacher’s and mental health practitioner’s perspectives on implementing CPS in a special education high school setting? – the researcher conducted two focus group interviews. One was with the mental health staff of the building and one group was with teachers that had one or more students involved in working with mental health staff on CPS. Interview questions can be found in Appendix B.

Overlapping common themes that emerged from the interviews related to time, buy-in, structure, trust, and the introduction of the initiative. Staff have received training in CPS ranging from a 1-week seminar to being self-taught to having the strategy introduced at a staff meeting. Additionally, consult time with the trainer of CPS was given to mental health staff throughout the year monthly. Initially, 50% of the mental health staff felt frustrated with time and resources given to implement this initiative.
Mental health and teachers all felt that not enough time and resources were afforded at the beginning of the year that offered support to implement this strategy the way it should be implemented. Forty percent of staff felt this was a good strategy and could be very successful with the correct structures in place. Additionally, 7 out of 12 staff members commented on how the initiative was poorly introduced to the staff.

**Introduction of the initiative.** One variable that all staff felt impacted the full implementation of this strategy was the way it was introduced at the beginning of the year. The strategy was explained at the beginning of the year staff meeting. Staff perceived that this strategy would immediately replace external consequences for the students who skipped class habitually. Formerly, the program would assign in-school suspension and out of school suspension for these behavioral infractions. According to the staff, the way CPS was introduced to staff by the principal was that 45% of the behavioral infractions were due to students skipping classes and this CPS strategy is meant to solve that problem. At the beginning of the school year, administration stopped assigning in-school suspensions for the students skipping classes. This led staff to believe that student elopement was not going to have consequences any longer due to the strategy being introduced. One teacher said, “People thought this would fix the kids skipping.” Additionally, the teachers felt not enough time or training was given at the beginning of the year. Staff felt this model could be highly effective with the population in the building, but then as the school year started, there was less buy-in because of the way it was presented and with the shift of in-school suspensions no longer being utilized as a behavioral consequence which led to higher frustration levels from the staff. Concurrently, mental health staff felt that proper structures, support and resources were
not created immediately at the beginning of the year. Mental health staff felt the implementation is still going very slowly because of student trust. “Sometimes it takes a year or even two just to get the student to trust you, and then kids are still hopeless that nothing will change.” Several staff members agree that the process was not introduced well, and that is a barrier to the way staff perceive the strategy.

**Buy-in.** Mental health staff attended most of the training and stated that there is good language to use as a model within the materials, however, the language feels “ingenuine” if the staff continuously uses the same language every day. The strategy also allows staff to look at things differently where “lots of good conversation with staff is going on.” One mental health staff added, “The kid gets to practice problem solving because the world is confusing. They can learn a solution, try a solution out, put it into action, and actually use it.” Another staff member added that once this problem is solved, the student keeps coming back to solve more. Two teachers agreed this strategy was effective by examining why a behavior was occurring from a specific student. The language of the strategy allows the mental health practitioner to explore what the student was thinking at the time of the behavioral infraction and it simplifies the motive behind the behavior. Additionally, students can learn important skills of problem solving and communication. Once the student buys into the method, and trusts and talks with the adult, the student comes back to the mental health clinician more often to solve more problems. Both mental health practitioners and teachers feel they understand why a student acted the way they did that caused the behavior to occur. One mental health staff member commented that once the lens is changed for the staff to see why the behavior occurred, the way they approach the student is different. One teacher stated she had an
“ah-ha” moment once the behavior and lagging skill were explained from the mental health counselor, and she said she approaches the student differently now. Three teachers commented on how they feel they have more insight into behaviors and feel they are more tolerant of behaviors. Teachers also felt hopeful as they start working on this strategy more consistently, it forces them to look at why behaviors are happening.

Conversely, one teacher reported that her student had been participating in the method and questioned “Why now?” The student asked why this was being done now, because he has struggled his whole life with these problems. The student stated to the teacher that it will not matter in a year when he graduates, so why bother now. Four teachers agreed that this method is too late to be teaching a student these skills and the strategy should be taught at a lower level.

Half of the teachers also reported that there is not staff buy-in from paraprofessionals because they were not part of the introduction meeting. Fifty percent of the teachers feel that their plates are all so full, and don’t have time to take on another initiative when they have so many other things to worry about. Specifically, four teachers collaborated on how difficult it is to find time or energy to sit down with mental health staff at the end of the day and review an itemized checklist of 35 checkboxes to identify what problems a student is having. However, one teacher stated hopefulness that this strategy could work given the correct time and structure. She said that she feels like there “is still a piece missing, experience, not implemented long enough.” Another teacher agreed that sometimes in the meetings, they feel like banging their head against the wall, and that “there is no buy-in, even from mental health.” Three teachers also felt like there is still not buy-in because too many people are still focusing on behaviors and not skills.
**Time and structure.** Mental health staff stated that during the beginning of the year, the structures were not in place to implement this strategy with fidelity. One mental health staff member commented that they did not really start implementing the model until mid-year. Relating back to the introduction of the model, one mental health staff member commented:

There was no communication system in place at the beginning of the year, so the teachers were growing frustrated because they did the ALSUP (Assessment of Lagging Skills and Unsolved Problems), and then it could have been more successful if we had a clear vision, up front, of like, “This is our five-year plan of what we want for Ross Greene, but this is what we’re focusing on this year.” So at least the teachers knew where we were and where we wanted to be. It wasn’t really transparent, and I think to a lot of staff it didn’t feel like it was planned out and thoughtful in how we were moving forward. I think a lot of them felt like they were in the dark, because maybe we had one or two whole building trainings, but then they didn’t hear about it for months at a time.

Additionally, one-third of mental health felt there was no direction on which students to choose at the beginning of the year. They thought all students could benefit from the strategy, but the staff was not given any direction to begin with. All six mental health staff agreed there was not appropriate time in the day to have the structure to work through a problem with a student, and to follow up with the student’s teacher. The mental health staff felt that some students were not appropriately placed in the program and the shift of leadership, with one principal leaving and another one coming in mid-year, offered more challenges than usual.
Teachers offered ideas on how to make this initiative work more effectively. They communicated a need to be with their students on their caseload, in homeroom, because they want to do more relationship building. Three teachers all agreed on this point. Additionally, the mental health staff acknowledged all the other competing things the teachers have to deal with such as IEPs, and; while the teaching staff felt like the mental health staff’s caseloads were packed. One teacher explained time and structure challenges by stating:

I think we spend an awful lot of energy on academia here because these kids are expected to pass Regents exams and get diplomas and those sorts of things, which is fine and wonderful. However, I think that a lot of these kids once they meet the academia requirements but don’t meet all the rest of the pieces because we just plain don’t have the time, the facility, all the other things that might be necessary to be able to go through and do all that (referring to conversations with students on solving a problem).

Teachers felt that CPS is a very structured program and should have more time built in the day to solve problems. Teachers also felt that the structure lacked by not having all the same team working together. One teacher commented that he would like to see the structure of one mental health staff member assigned to one classroom, which fosters easier collaboration. Additionally, all teachers commented that they don’t even see some of their students who are on their caseload because they don’t have them in class. One teacher suggested having a class on lagging skills for the students to participate in.
Trust. One mental health staff member reported they feel one student’s problem has truly been solved. The student struggled with being late to class, and it was found that the lagging skill was around the sense of time.

He struggled with failing global studies. Our focus kind of started out specifically geared towards global because he did not pass it last year and this is the second year he’s taking it. They were very specific problems that came out. One of them, he told me the reason he failed last year was because every time he’d walk into class, someone was in his seat. And if someone was in what he saw as his seat, he would leave, and he would not stay. So, we came up with a plan around that, where he would leave earth science 2 minutes early so he could get to global and get the seat that he wanted, and that was successful. Another thing was getting over to collision late, and he kind of, one of his lagging skills was …I forgot how it’s worded, but it’s geared, it’s around time, like having a sense of time. And he really struggles with that, so we had to set an alarm for him on his phone for collision so he knows the time to get over there. Some of those are skills, but the biggest thing that he’s learned is communication and that there is value in communicating and problem solving with people… because that is the number one thing he has done very well on, knock on wood, is little to no verbal aggression. And he has passed all his classes this year.

Another mental health practitioner stated that a student has solved several problems, but they never did a formal plan B. The trust and buy-in is important from the student because it “changes how a student experiences their self internally.” However, sometimes, the student doesn’t think things will change.
Summary of Results

Collaborative and proactive solutions (CPS) was introduced as a new initiative to the staff of a small, center-based high school that serves students with EBD at the beginning of the year. Each student participated in the Self-Regulation Questionnaire (version for students with LD) at the beginning of the year and again at the end of the year. The mental health staff was trained at various levels to implement CPS to students at a Tier 2 level. Teachers were expected to participate in the collaborative process of this initiative.

Based on the quantitative data of the Self-Regulation Questionnaire (version for students with LD), 40% of the students who had experiences working with CPS increased their autonomous regulatory style; however, the results were not statistically significant. Teachers and mental health staff were interviewed in two focus groups separately. Common themes that emerged were time, buy-in, structure, trust, and the introduction of the initiative.

Based on the cumulative results, all staff believed this strategy could be effective with the right supports in place. They felt that the way CPS was introduced to the building staff was not effective, yet they remain hopeful to continue this strategy with proper supports. Challenges implementing this strategy were time, structure and resources. They also felt buy-in is important from the staff and the students. Teachers and mental health staff believe this is a very effective framework that could impact many students; however, it is not the only strategy that should be used.

Chapter 5 presents a discussion of the results, implications, and conclusions of the research described in earlier chapters.
Chapter 5: Discussion

Introduction

Students with EBD often struggle in high school educational environments due to lagging skills in problem solving, academic deficits, and maintaining relationships with peers. The reauthorization of IDEA in 2004 mandates schools adopt frameworks to deliver services such as Response to Intervention (RtI); however, research is limited in behavioral programs that have been adopted by schools due to cost of implementation and intensity of labor (Yong & Cheney, 2013). Ryan and Deci (1999) believe when a person is autonomously engaged in therapeutic processes such as mental health therapy, they are more likely to integrate learning and behavior learning and behavior change into their life, which enables stronger outcomes (Johnson, 2012). Greene (2016) believes “Children do well if they can” (p. 10). When students engage in conflict resolution skills and social skill training, they have stronger peer relations which can contribute to a sense of competence with problem-solving skills (Field & Hoffman, 2012). In this study, a small high school special education program adopted collaborative and proactive solutions (CPS) to implement throughout the 2016-17 school year. The research problem addresses whether students gained autonomy, competence and/or relatedness based on a pre- and post-questionnaire, and the issues encountered during the implementation of the strategy of CPS.

The research design of this study was convergent parallel mixed methods which allowed the researcher to gain a broader perspective on the teachers’ and mental health
staff’s perspective on this building wide initiative, while using pre-existing data from the Self-Regulation Questionnaire (version for students with LD). The purpose of this study was to determine if the Self-Regulation Questionnaire (version for students with LD) is an effective tool for identifying target areas of intervention for students with EBD, and if the implementation of CPS improves students’ skills. By using a convergent parallel mixed methods approach, Campbell and Fiske (1959) believe a psychological trait such as competence could be best understood by gathering different forms of data (Creswell, 2014).

Chapter 5 presents discussion and interpretation of the research findings from Chapter 4, and incorporates previous studies. The first section will discuss implications and findings from the data from the Self-Regulation Questionnaire (version for students with LD), and the focus group interviews with both teachers and mental health staff. The second section will discuss limitations of the research, while the third section discusses recommendations for future studies. The final section will provide a summary of the chapter.

Implications of Findings

Competence, autonomy and relatedness are the three psychological traits that drive intrinsic motivation. One or more of these traits can be found lacking in students with EBD. The Self-Determination Questionnaire (version for students with LD) measures regulatory styles from more controlled to more autonomous in the subscales. The subscales are calculated to produce a Relative Autonomy Index (RAI). If the number is represented by a negative weight, the regulatory style is more controlled. If the number is represented by a positive weight, the regulatory style is more autonomous. Based on
the data shown in Appendix C, 40% of the students increased their autonomous regulatory style positively; however, 50% increased to a more positive number from the pretest. At the beginning of the year, 100 students took the pre-questionnaire, while 13 students were involved with the CPS strategy. Of the 13 students who were involved in the strategy, one student dropped out of school and one student was transferred to a different program. One student did not take the post-assessment. Therefore, data was only available in pre-and post-assessment on 10 students. The researcher set out to run a statistical analysis of a paired sample t-test; however the sample size was too small to run to show statistical significance. Therefore, each student’s data from the pre- and post-questionnaire was calculated individually for difference in regulation style to show the differences in pre- and posttest data. Although the data sample is small, a larger population size could provide statistically relevant results to see if in fact the RAI does increase. Based on these findings alone, there was not a statistical significance to learn whether the Self-Regulation Questionnaire (version for students with LD) can be paired with the CPS strategy.

High school students with EBD can be difficult to research based on findings from Zigmond’s 2006 study where 100 students were chosen, and 40 dropped out by the end of the year. Additionally, the implementation of CPS is time consuming and structures need to be in place at the onset of the strategy, based on findings from focus group interviews with mental health staff and teachers. Two separate focus group interviews were conducted with mental health staff and teachers separately, while data was coded individually, and then combined to correlate themes. Overall, five themes
emerged that focused most on time, buy-in, structure, trust, and the introduction of the initiative.

**Time.** Mental health staff participated in training that ranged from 1 week, to a 2-day seminar, to one being self-taught. The time to learn the technique leads to the fluency that it takes to implement CPS. Because of the steps involved in the ALSUP discussion, collaboration with other staff members and steps in the Plan B process, and then implementation phase, time can be a major factor while the student is in program. The student still has eight classes and lunch to attend, and the problem solving takes time to build rapport, trust and get buy-in from the student. Mental health staff felt the strategy had “good language within the materials,” yet also one staff member commented on how the language felt “ingenuine” or “contrived” because it felt redundant to say to a student every time he saw them, “I notice you had difficulty doing this. What’s up? Like, every day.” Based on these comments, the strategy language needs to be modified for the staff to have a more “organic conversation” daily from the mental health counselor’s perspective throughout the structure of a typical high school day. The staff member and student are in a counseling session for 40 minutes and that is the time when behaviors and problems are spoken about and solutions are discovered to the problems the student may be facing. Then plans are implemented by the student while the counselor collaborates with the teacher to allow the teacher to have input on the plan and whether it is achievable. Most students in the building only have counseling one time a week with their counselor, so if CPS is to be implemented with a student, more counseling should occur in a week’s time to gain momentum in a shorter period.
**Structure and buy-in.** Mental health staff have almost 15-20 students who are on their caseload that have mandated counseling on their Individualized Education Plan (IEP). A student’s counseling services typically range from 1-2 times per week for 40 minutes. Counselors are expected to see the students during their established counseling time, and be available when a student is in crisis and comes to the counselor’s office unexpectedly. The ALSUP is designed to be proactive where no problem solving should take place during a crisis. Additionally, teachers must teach designated courses for graduation, which involves mandated seat time, and manage six students on their caseload, while participating in all the other meetings that take place during a school year. Collaboration between staff usually takes place at the end of the day when the students have left. Teachers and mental health staff are tired from the day and feel overloaded. One teacher stated that the end of the day is not the optimal time to collaborate on a list of 30-40 lagging skills that a student may have. Conversations often get “stuck on one thing” and focus on the behavior rather than the solution, and get prolonged. Additionally, the students feel like it is too late to learn the skills presented because their experiences have not been positive in their education so far, and do not feel like anything will change now in high school when they are going to graduate in a year anyway. Students were skeptical while problem solving sessions were taking place in counselor’s office during a non-crisis time. While teachers felt like this was “another initiative to be tried and put on the shelf”, they recognize that this initiative is worth continuing with the correct structures in place. Based on these findings, time for meetings need to be planned with the structure of a facilitator and a set agenda in place for optimal results.
**Introduction of initiative and trust.** The most significant findings of this study focus on trust and the introduction of the initiative. While this study focused on staff interviews and student data, the results reveal leadership implications. The CPS initiative was introduced to school staff at the beginning of the 2016-17 school year at a staff meeting. According to staff, the message received was that this initiative would prevent students from skipping class and getting suspended from school. Staff felt that this initiative was “sort of thrown in our laps” and structures were not put in place. Two staff members felt strongly that they did not agree with the way the initiative was introduced and felt it was not communicated to staff well. Staff also felt they were “in the dark with no transparency.” While some mental health staff received some training on the process, many other teachers did not. According to Yong & Cheney (2013), RtI is labor intensive and requires more training and resources to implement. School nurses, guidance counselors, mental health clinicians and teachers all need to be trained (Sultowski et al., 2012). CPS was not get implemented immediately at the beginning of the year due to the lack of buy-in from staff, lack of understanding of the initiative, and lack of trust from all students. However, as the school year started, students would skip classes as they always have, yet no consequences were given for the skipping, and therefore the staff blamed lack of consequences for student elopement on this initiative. Another interruption to the implementation of this strategy was the principal that started the school year left for employment in another school district and a new principal started in January. The new building principal was supportive of the initiative and encouraged staff to continue with CPS; however, as with any new leader, trust was not established immediately.
Conversely, mental health staff felt good conversations were taking place with students and teachers. Teachers commented that they did not see the same behaviors that they used to from specific students. One mental health staff member commented that the philosophy of this process has “made us look deeper at procedures and other programs we have in place.” One teacher even commented that it feels like a good idea even though there feels like a piece is missing, such as not enough time has been spent on this. Saeki and Quirk, 2015 also found that this level of intervention requires intensive staff and resource support to be successful. All staff felt this strategy is not for every student. If this strategy is continued in the following school year, more support for staff will be necessary.

**Limitations**

Limitations of this study consist of the population sample size and the limitations of a focus group. The limitations of the paired sample t-test are that the group was too small to run the test on. Future considerations should be to use a larger sample size. A limitation of a focus group involves group dynamics. One person may be too vocal and dominate the conversation. Another person may not want to express individual thoughts in a group setting for a variety of reasons. Additionally, a person may also feel persuaded to agree with another person’s point in a group setting. Conversations could focus around one aspect so much that other aspects or variety in conversation are not brought up.

**Recommendations**

Future studies could consist of larger sample sizes with more staff training required at the onset of implementation. Other data sets could also be studied that could add richness to the study, such as suspension, referral and attendance data. Additionally,
the research suggests students with EBD have a higher dropout rate at the high school level, so this study would be beneficial at the elementary or middle school grade levels to increase skills at an earlier age. A larger sample size would be beneficial combined with an independent sample size to see if the Self-Regulation Questionnaire is a valid measure for this strategy.

While this study is predominantly being initiated from the mental health counselors’ office, it would be interesting to study the implementation through the teachers’ lenses. Specifically, if this model of problem solving can be implemented in a small classroom of students, can it also be implemented in a larger, general education population because of the time invested with each student; and if the teacher can explore plan B options?

Based on qualitative findings, a leadership framework would be beneficial to study at the onset of the implementation of the initiative. A longitudinal study could also be beneficial as the strategy continues into year two of implementation with structures and supports in place. Based on results from the first year, staff could target which students could benefit from this strategy, and implement CPS fully if trust and rapport is already built from the previous year. Additionally, a parent component could be taught to be implemented in the home. Then, as the student experiences the same language at home and at school, intrinsic motivation could be studied for further competence in academics.

**Conclusion**

Student growth in areas of competence, autonomy and relatedness is necessary to be taught in the formative years just as academics are. Schools provide the perfect environment for problem solving skills and strategies to navigate relationships with
others. As students with EBD struggle with these specific skills, collaborative and proactive solutions can be an effective strategy in the school environment for students to gain autonomy, competence and relatedness when the appropriate time is allocated, and the proper structures are put in place. Based on this study, 50% of the students who took the Self-Regulation Questionnaire (version for students with LD) increased their RAI to a more positive number. Teachers and mental health counselors agree this strategy can be a beneficial initiative when appropriate structures and training occur. Leadership is critical when introducing a new initiative to have buy-in and trust from staff.
References


Katz, I., Kaplan, A., & Gueta, G. (2009). Students’ needs, teachers’ support, and


Nelson, J. R., Benner, G. J., Lane, K., & Smith, B. W. (2004). Academic achievement of
K-12 students with emotional and behavioral disorders. *Exceptional Children, 71*(1), 59-73.


Appendix A

Self-Regulation Questionnaire (version for students with LD)

**The Scale (version for students with LD)**

<table>
<thead>
<tr>
<th>Why I Do Things</th>
<th>Always</th>
<th>Most of the time</th>
<th>Sometimes</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name________________________</td>
<td>Age_________</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boy or Girl (circle one)</td>
<td>Teacher _____________________</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I do my classwork so that the teacher won’t yell at me.
   - Always
   - Most of the time
   - Sometimes
   - Never

2. I do my classwork because I want the teacher to think I’m a good student.
   - Always
   - Most of the time
   - Sometimes
   - Never

3. I do my classwork because I want to learn new things.
   - Always
   - Most of the time
   - Sometimes
   - Never

4. I do my classwork because I’ll feel bad about myself if it doesn’t get done.
   - Always
   - Most of the time
   - Sometimes
   - Never

5. I do my classwork because it’s fun.
   - Always
   - Most of the time
   - Sometimes
   - Never

6. I do my classwork because that’s the rule.
   - Always
   - Most of the time
   - Sometimes
   - Never

7. I enjoy doing my classwork.
   - Always
   - Most of the time
   - Sometimes
   - Never

8. I try to answer hard questions in class because I want the other kids to think I’m smart.
Always   Most of the time   Sometimes   Never
9. I try to answer hard questions because I’ll feel bad about myself if I don’t try.

Always   Most of the time   Sometimes   Never
10. I try to answer hard questions because it’s fun to answer hard questions.

Always   Most of the time   Sometimes   Never
11. I try to answer hard questions because that’s what I am supposed to do.

Always   Most of the time   Sometimes   Never
12. I try to answer hard questions to find out if I’m right or wrong.

Always   Most of the time   Sometimes   Never
13. I try to do well in school because that’s what I am supposed to do.

Always   Most of the time   Sometimes   Never
14. I try to do well in school so my teachers will think I’m a good student.

Always   Most of the time   Sometimes   Never
15. I try to do well in school because I like doing a good job on my school work.

Always   Most of the time   Sometimes   Never
16. I try to do well in school because I will get in trouble if I don’t.

Always   Most of the time   Sometimes   Never
17. I try to do well in school because I’ll feel really bad about myself if I don’t do well.

Always   Most of the time   Sometimes   Never

**Scoring the SRQ-A (version for students with LD).** As with the standard version of the SRQ-A, you first calculate the subscale score for each of the four subscales by averaging the items that make up that subscale. Always is scored 4; Most of the time is scored 3; Sometimes is scored 2; and Never is scored 1. The four subscales are: external regulation, introjected regulation, identified regulation, and intrinsic motivation. There are fewer items on this version than on the standard version, because students with LD typically
have a shorter attention span. Listed below are the item numbers associated with each of the four subscales.

- External Regulation: 1, 6, 11, 13, 16
- Introjected Regulation: 2, 4, 8, 9, 14, 17
- Identified Regulation: 3, 12, 15
- Intrinsic Motivation: 5, 7, 10

You can use the individual subscale scores in your analyses, and you can also use the Relative Autonomy Index (RAI). To form the RAI for this scale, use the following formula to combine the subscale scores:

\[2 \times \text{Intrinsic} + \text{Identified} - \text{Introjected} - 2 \times \text{External}\]

(Deci, Hodges, Pierson, & Tomassone, 1992).
Appendix B

Focus Group Interview Questions

1. Describe your experience with CPS in the high school.

2. Do you feel like you understand the student’s former behavior choice motives after implementing this strategy? Explain how your perceptions have changed.

3. What have been challenges during the implementing this model?

4. Have any “unsolved problems” been solved through the use of the CPS strategy? Explain.

5. Have any changes occurred in the school by implementing CPS?

6. Do you feel implementing this model increased the student’s skills/competency? If so, how?
Appendix C

Student Pre-and Post- Data with Changes to Relative Autonomy Index (RAI)

<table>
<thead>
<tr>
<th>Pre-questionnaire score</th>
<th>Post-questionnaire score</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>-3.29</td>
<td>2.34</td>
<td>5.63</td>
</tr>
<tr>
<td>-1.5</td>
<td>1.93</td>
<td>3.43</td>
</tr>
<tr>
<td>-0.64</td>
<td>-1.84</td>
<td>-1.2</td>
</tr>
<tr>
<td>0.21</td>
<td>-0.89</td>
<td>-1.1</td>
</tr>
<tr>
<td>-3.04</td>
<td>-3.99</td>
<td>-0.95</td>
</tr>
<tr>
<td>-2.72</td>
<td>-3.67</td>
<td>-0.95</td>
</tr>
<tr>
<td>-0.81</td>
<td>-1.64</td>
<td>-0.83</td>
</tr>
<tr>
<td>0.62</td>
<td>-0.11</td>
<td>-0.73</td>
</tr>
<tr>
<td>0.64</td>
<td>1.93</td>
<td>1.29</td>
</tr>
<tr>
<td>-3.06</td>
<td>-1.68</td>
<td>4.74</td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td>-0.87923</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td></td>
<td>1.47762</td>
</tr>
</tbody>
</table>