OUTCOME EVALUATION OF AN ELEMENTARY-LEVEL DISCIPLINARY ALTERNATIVE EDUCATION PLACEMENT

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Public school systems are required to provide a safe learning environment free of violence and disruption. For students who threaten the learning of themselves or others, schools frequently develop a disciplinary alternative education placement. Students with a history of behavior problems at school are at greatest risk for future behavior problems and academic failures. In response to evidence that removal discipline techniques had little efficacy, schools have focused on identifying alternative methods of maintaining order and safety. This study evaluated the outcomes of an elementary-level alternative discipline placement with unique intervention programming.

The program includes interventions to increase the effectiveness of traditional alternative discipline placements. Activities focus on promoting social competence and developing social information-processing skills intended to increase the behavioral and academic success of student participants. The program excludes students from the general student population and consists of a behavior management system with gradually increasing behavior expectations, reinforcements and consequences, focused social skills lessons, counseling, and parenting classes.

Participants were consistently lower performing academically than control group students both before and after the program. However, students who experienced fewer
discipline removals after the program had higher report card grades. Overall, participants had a decrease in discipline removals after participating in the program but continued to have more lost instruction days due to discipline than control group students. The higher grade level students had less behavior improvement following the program than younger students. No relation was found between a student’s level of success in the program and their academic or behavioral performance changes. Future research needs include a comparison of students referred for persistent misbehavior and those referred for a single, serious incident and the need to assess the specific skills addressed in the program.
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CHAPTER I

Introduction

Statement of the Problem

To encourage the academic growth of their students, public schools must work to provide a learning environment free from the threat of violence and disruption. As a result, alternative education discipline programs are in place to provide services to students who have a history of and a potential to continue interfering with the educational process. These students break rules by engaging in disruptive or dangerous behavior. At the elementary level, this group of students has been found to be at greatest risk for future behavior problems and academic failures. Schools must work to implement strategies that reduce the risk of recurring disruptive behavior and provide students with skills to benefit from academic instruction leading to improved behavioral and academic outcomes. One discipline program, developed to increase the behavioral and academic success of these students, helps students develop the skills and habits necessary to participate successfully in the general education curriculum. However, there has been little evaluation of this or similar programs to determine whether the program has an impact on these students’ behavioral and academic outcomes. The
purpose of this study is to determine the effectiveness of this elementary school alternative education program on student behavior and academics.

**Review of Literature**

Students who demonstrate disruptive behaviors at school often experience social isolation (Sullivan & Strang, 2002/3) or rejection (Deater-Deckard, 2001), decreased academic performance (McEvoy & Welker, 2000), and have an increased likelihood of later psychopathology (Offord et al., 1992). Additionally, the earlier disruptive behavior becomes a pattern, the more frequent and intense the disruptions become over time (Lahey & Loeber, 1994). When students exhibit disruptive behavior long-term, they are at increased risk for poor academic achievement, as assessed by grades and standardized test scores, school dropout, the underdevelopment of adaptive behaviors, and negative interactions with the legal system (Greenbaum et al., 1996; Janosz, Le Blanc, Boulerice, & Tremblay, 2000; McEvoy & Welker, 2000; Torestad & Magnusson, 1996). Untreated disruptive behavior tends to increase over time and the negative impact on society increases (McEvoy & Welker, 2000).

In contrast, children who utilize social skills appropriately are considered socially competent and are less likely to demonstrate ongoing disruptive behaviors in the school setting. Socially competent students contribute to a positive school climate that fosters all students’ learning outcomes in a positive manner. Social skills are learned behaviors demonstrated in situation-specific social situations and promote interpersonal relationships (Elliot, Roach, & Beddow, 2008). This includes the use of cooperative and prosocial behaviors, initiation and maintenance of relationships, management of
aggression and conflict, maintenance of self-worth and self-confidence, and emotional regulation and reactivity (Wittmer, Doll, & Strain, 1996). Social competence is the judgment that social skills are used competently in various contexts (Gresham, 2002). Social skills are the isolated components of interpersonal relationships while social competence is the application of social skills with appropriate timing, subtlety, and awareness.

Success in school requires both academic performance and behavior compliance. Students who habitually do not comply with the social standard of behavior frequently do not possess the social skills or they lack the competence with social skills needed to be successful behaviorally (Sugai & Lewis, 1996). Moreover, there is an inverse relation between social competence and disruptive school behavior. Undesirable behavior decreases when the occurrence of socially competent behavior increases. Interventions for disruptive behavior often attempt to increase the occurrence of positive behavior that replaces and cannot co-occur with the problematic behavior.

Given that disruptive behavior patterns have many negative outcomes across a variety of domains and contexts, effective interventions are needed. The negative outcomes for these students could be extreme if not addressed effectively, therefore schools desire to implement the most successful and appropriate programming within their means. Commonly used school discipline placements are intended to reduce the recurrence of disruptive behavior. However, popular exclusionary discipline techniques like suspensions and expulsions that do not include corrective interventions to address inappropriate behavior are historically less successful than intervention-based discipline
As a result, many education administrators have worked to establish procedures to improve the outcome of exclusionary discipline placements. Frequently, these placements provide an intervention to encourage replacing the disruptive behavior with a more appropriate alternative. If the desired behavior successfully replaces the disruptive behavior, the risk for negative outcomes for these students decreases.

Broad-reaching programs with coordinated prevention and intervention efforts appear to have the greatest effect on the greatest number of students. These interventions have been shown to be effective at reducing aggression, office discipline referrals, and parent reports of behavior problems (Bry, 1982; Cirillo et al., 1998; Fraser et al., 2005; Vanderhaar & Munoz, 2006, November 9). They also increase perceived social competence, social and emotional coping skills, improved peer relations, healthy parent-child interactions, and academic achievement (August et al., 2002; Conduct Problems Prevention Research Group, 1999a,b; Ervin et al., 2007; Robinson & Rapport, 2002).

The Current Study

This study is an outcome evaluation of a disciplinary alternative education program for elementary students with a history of significant disruptive behavior. To increase the effectiveness of the discipline placement, program coordinators developed treatment interventions to increase the skills required to avoid future disruptive behaviors. It provides interventions designed to develop social competence by teaching and practicing appropriate behavior for the school environment. This program excludes
participating students from the general student population but provides academic and behavioral instruction in a structured setting. The purpose of this study is to evaluate whether this elementary-level alternative discipline placement successfully remediates problem student behavior and improves student academic performance.

The discipline program is designed to provide specialized intervention for students most at-risk for continuing their extreme disruptive behaviors. Students are referred to the program based on a single, serious incident or for pervasive ongoing behavior problems that have not been successfully remediated at the home campus. The program serves students who are in kindergarten and are at least six years old through the fifth grade. The program consists of a series of behavioral levels, each of which a student must progress through to reach graduation from the program. Each level has specific behavioral requirements and reinforcement menus available. As a student progresses through the levels, positive behavior expectations increase and the available privileges and rewards become more appealing.

The disciplinary education program under consideration for this study provides interventions that will improve student outcomes by reducing the number of days spent assigned to further exclusionary discipline placements (i.e., in-school and out-of-school suspensions) as a result of disruptive behaviors. Assignment to in-school and out-of-school suspension typically occurs after engaging in disruptive behavior or aggression that has not responded to non-exclusionary discipline actions, such as verbal warnings or limiting privileges. Participation in the program is intended to provide the skills to avoid these circumstances by teaching alternative behaviors and appropriate responses
to correction from authority figures. Additionally, participation in the program will increase academic achievement. Improvement in student behavior will lead to increased opportunities to access the curriculum with less disruption to instruction. This increased instructional time and engagement in learning will lead to increased grades on student report cards.

**Research Questions**

1. (a) Do participants in the disciplinary alternative education program demonstrate improved school functioning (assessed as improved school attendance and fewer disciplinary referrals) after participation in the program?

   (b) Do participants in the disciplinary alternative education program demonstrate improved academic performance (assessed as improved grades) after participation in the program?

2. (a) Is there a relation between students’ level of success in the program and changes in their school functioning?

   (b) Is there a relation between students’ level of success in the program and changes in their academic performance?

3. (a) Are changes in school functioning and academic performance moderated by type of behavior infraction for which students entered the program?

   (b) Are relations between success in the program and school functioning/academic performance moderated by type of behavior infraction for which students entered the program?

4. (a) Are changes in school functioning and academic performance moderated by
students’ grade level?

(b) Are relations between success in the program and school functioning/academic performance moderated by students’ grade level?

**Significance of the Study**

In an environment with decreasing resources available for increasing educational needs, it is important for each school district to continually evaluate whether programs are providing the intended benefit so their resources are utilized efficiently. This examination will provide information regarding whether the significant resources dedicated to a small number of students at a high risk for future problems is producing the intended change. Should the participants demonstrate the intended change the students will demonstrate improvements and the classrooms to which they return will have benefits. Classrooms in which there are few behavior problems generally have higher academic performance and greater teacher satisfaction (Conduct Problems Prevention Research Group, 1999b; McEvoy & Welker, 2000). In the converse, if the students referred to this program do not demonstrate improvements in problem behaviors and academic performance, they are at increased risk for future delinquency in the school and community, academic failure, and dropping-out from school. Not only are these outcomes costly to an individual campus and school district, these outcomes negatively affect society as a whole in the long term. Additionally, if students at a high risk level for continued problems demonstrate improvements in this program, components of this program can be generalized to the greater student population, potentially improving outcomes for all students. This feedback is valuable to a school
district for self-evaluation and to make changes increasing the effectiveness and efficiency of programs which is one of the goals in school improvement plans (Godber, 2008).
CHAPTER II

Review of the Literature

Introduction

Disruptive behaviors often are discussed as occurring along a continuum from normal, developmentally appropriate behavior to clinically significant, severe disruptions (Schroeder & Gordon, 2002). Disruptive behaviors in children include a diverse range of behaviors from excessive crying and attention seeking to aggression towards self, others, or objects and delinquency. Throughout a child’s development, there are expected and typical displays of disruptive behaviors. Sometimes these behaviors increase in intensity, duration, or frequency, falling outside the socially accepted ranges of behavior causing great concern for parents and other involved adults (Achenbach, 1990; Lahey & Loeber, 1994).

The socially accepted range of disruptive behavior varies with changing circumstances and developmental stages. Over time, it is expected children acquire social skills of increasing complexity and implement the skills in more complex and subtle ways to demonstrate what is identified as social competence. The expectation is
that developing social competence leads to a child demonstrating less disruptive behavior. Social skills are learned behaviors that allow a person to function in a social situation (Elliott, Roach, & Beddow, 2008). More specifically, social skills include the use of cooperative and prosocial behaviors, the initiation and maintenance of relationships, management of aggression and conflict, maintenance of self-worth and self-confidence, and emotional regulation and reactivity (Wittmer, Doll, & Strain, 1996). Although mastery of each of these isolated skills are important for decreasing disruptive behavior, it is the more complex skill of appropriately applying social skills in changing contexts that results in the greatest change in a child’s behavior. Social competence is the perception that social skills are used competently in various contexts (Gresham, 2002). Social competence is the application of isolated skills based on social-cognitive processing. Thus, interventions for disruptive behavior must address deficient social skills in addition to the social-cognitive processes that result in social competence.

Theoretical orientations vary in their interpretation of the relationship between social competence and disruptive behavior. Specifically, anti-social behavior is often explained via two general approaches: deficits in social skills or differences in social information-processing. Many individuals who engage in aggressive behavior are highly skilled in assessing social situations and possess social skills but have different social reasoning, goals, and purposes leading them to use their social skills in antisocial ways (e.g., pretending to be a friend to gain access to a desired object). This is not a deficit in social skills but a social information-processing difference in which the intervention focus should be on the internal processes rather than specific social skills. For example,
bullies may have well-developed skills at perceiving others’ mental states and manipulating others through “theory of mind” skills (Smorti & Ciucci, 2000; Sutton, Smith, & Swettenham, 1999). A different example is a child who may not have the social knowledge structures, or social skills, to solve social problems by methods other than aggression (e.g., stealing an object rather than asking to borrow it). This is a deficit in social skills and would require instruction in specific skill areas before instruction in the social information processing could be effective. Therefore, some theories of disruptive behavior use a skill-deficit based explanation whereas other theories explain disruptive behavior as caused by inappropriate strategies and goals. For either of these approaches, undesirable behavior is reduced by increasing the occurrence of positive behavior that replaces and cannot co-occur with the problematic behavior, also referred to as incompatible replacement behaviors. However, the increase in the replacement behavior may occur by teaching specific social skills or by teaching different cognitive processes to attain goals.

In the context of disruptive school behavior, incompatible replacement behaviors may include using positive social, leadership, and communication skills. Developing and using these skills requires having appropriate models for behavior, having actions monitored by authority figures, having the opportunity to experience academic and social success, and having meaningful feedback regarding behavior (Sugai & Lewis, 1996). These interventions can serve to teach missing social skills or to change social-information processing techniques. By increasing positive behaviors and decreasing negative externalizing problems, student time spent engaged in academic
tasks in the classroom should increase.

Although schools in recent history have not been required to directly teach and evaluate social competence in their students the same way they address traditional topics like reading and mathematics, it is apparent students’ competence in this area is critical for school success and cannot be ignored. Behavior problems have been tied closely to academic failure (see review by McEvoy & Welker, 2000), and in extreme cases may lead to drop-out (Janosz, Le Blanc, Boulerice, & Tremblay, 2000). Individuals who engage in persistent antisocial behaviors throughout life typically begin this behavior early in life. Over time, this behavior increases in frequency and intensity in a broader variety of settings. McEvoy and Welker (2000, p. 132) concluded “in the absence of effective interventions and rewarding prosocial opportunities, this group of young people poses the most serious threat to schools and to communities.” Currently, teachers have increasing levels of responsibility for the range and depth of material to be covered and are expected to produce measurable results from their teaching (U.S. Department of Education, 2001). As a result, the demand on teachers has decreased the amount of time available for addressing topics not directly measured on achievement tests, such as students’ social competence. Even so, there is a relationship between social competence and academic success (Ray & Elliot, 2006); therefore, in reference to long-term outcomes, it is beneficial for schools to address these skills in their students on an on-going basis.

In the long term, students with the ability to express negative feelings in an assertive manner rather than in a hostile manner, to control impulses, to follow
appropriate directions, to develop and maintain relationships, and to work in groups or individually can foster a positive learning environment. These can all result in the achievement of the education process’s broader goal; the development of a love of learning, positive social relationships, and smarter, more productive employees and employers in the community. Implementing a prevention and intervention program using this approach can be successful at reducing challenging behavior (Bry, 1982; Cirillo et al., 1998; Conduct Problems Prevention Research Group, 1999a, b; Fraser et al., 2005; Vanderhaar & Munoz, 2006, November 9). Consequently, the ultimate, broad goal of increasing student productivity is approached via behavioral school programs that produce change in classroom and peer-related behavior, and, in turn, ultimately increase academic skill acquisition (Refer to Fraser et al. 2005). The purpose of this study is to evaluate whether an elementary-level alternative discipline placement is a successful intervention remediating problem student behavior and encouraging the development of the character traits promoted by the school system.

**Review of Literature**

**Development of Social Competence**

Social skills are comprised of the various strategies needed in interactions with others in social contexts and the knowledge of which strategy to employ. This includes the use of cooperative and prosocial behaviors, the initiation and maintenance of relationships, and the management of aggression and conflict (Gresham, 2002; Wittmer, Doll, & Strain, 1996). Progress in social development often is measured by the progression of skills in maintaining self-worth and confidence, controlling internal
emotional regulation, and external reactivity (McNamara, 2002; Wittmer, Doll, & Strain, 1996). The appropriate application of social skills in increasingly complex and subtle social situations leads to overall social competence. Difficulties in any one area are sufficient to affect development in other areas and may influence a child’s overall life skills and outcomes.

A developmental perspective provides a framework for understanding the expression of social competence for varying age groups. An understanding of the patterns of child development allows for the differentiation between typical and atypical behaviors. At different stages and ages, the demonstration of specific social behaviors and the expression of emotional experiences change. Additionally, an understanding of an individual’s personal developmental history can assist with understanding how or why specific social behavior patterns have arisen. The judgment of a specific behavior as “abnormal” is based on a comparison with typical functioning at different development levels (Singh & Singh, 2001). A child’s school behavior can be evaluated by comparison to the behavioral expectations at the classroom- or building-level. Behaviors also can be rated on standardized instruments that have established norms on a national level. Both are based on the assumption that normal behavior is that which is demonstrated by most individuals at a particular age or developmental level and behaviors exceeding a predetermined difference from the mean are considered abnormal. Therefore, the definition of social competence varies based on age and the model used for comparison.

Behavioral learning theory provides alternative interpretations for the
development of social behavior. This includes conditioning processes from classical and operant procedures. Skinner (1976) and Pavlov (1941) described the processes of operant and classical conditioning for learning information and developing behavior patterns. This viewpoint indicated the reinforcement and punishment of various behaviors made behavior patterns more or less likely to recur. Skinner’s operant conditioning indicated behavior was modified by its consequences. Behaviors under the influence of operant conditioning were frequently considered voluntary and specific stimuli evoked conditioned responses. Pavlov’s classical conditioning theory indicated behavior was a response to stimuli in the environment. It was described as automatic and elicited by the stimulus. This approach stresses past social experiences as a predictor of future behavior and the need for changing the reinforcement and punishment contingencies for behavioral change. Individuals act in specific manners in social situations having been reinforced for the behavior previously. In their analysis of longitudinal and experimentally controlled studies, Dishion and colleagues (1999) explained the deviancy training observed in social situations through a behavioral perspective. Peers experience positive reinforcement during discussions of deviant behavior through laughter and increased attention, leading to an increase in future deviant behavior. From this perspective, interventions to decrease the demonstration of disruptive behavior must modify the specific behavior pathways that are reinforcing the disruptive behavior.

According to some theories, the development of social and emotional competence is an inherently social event. McNamara (2002) proposed three contexts
for the development of social competence; early life experiences, social-contextual factors, and school experiences. If within any of these domains there are significant models for age-inappropriate skills, a child may lag in his or her social development, and specific interventions may be necessary to remedy the deficiency. Learning the individual skills requires observation, modeling, rehearsal, and feedback in real-life social situations (Elliott, Roach, & Beddow, 2008; McNamara, 2002). Isolation and rejection from peers precludes these children from the opportunity to practice the skills they do possess or to develop new skills. This leads to more social difficulty and further interpersonal isolation, becoming a destructive cycle (Frick & McCoy, 2001; Sullivan & Strang, 2002/03). Social learning theorists presented observational learning as a method for the development of new ideas and behavior through the viewing of others’ experiences (Bandura, 1963; Baron & Byrne, 2004). This theory emphasized the influence of observation and imitation in the development of behavior. Social learning requires a level of self-efficacy, or a belief in one’s ability to do something in order to motivate someone to action. Also required is a model to observe and imitate.

Regarding the development of aggression and disruptive behavior, there is sizeable evidence supporting the importance of social context in which these behaviors occur and are likely to increase or decrease (see review by Deater-Deckard, 2001). Data indicate stable friendships with deviant peers leads to increased behavior problems over time while decreasing associations with these peers leads to an improvement or stabilization in behavior (Berndt, Hawkins, & Jiao, 1999). In addition, these behaviors have been observed to be taught and reinforced by associating with individuals who
engage in antisocial behavior (Dishion, McCord, & Poulin, 1999). Burks, Laird, Dodge, Pettit, and Bates (1999) concluded exposure to aggressive models leads to aggressive knowledge structures. The types of knowledge structures developed early in life influence children’s social cognitive processing and the presence of later externalizing problems, such as aggression.

Crick and Dodge’s (1994) model of social information processing suggested social information is managed via a complex interplay between sequential processing of individual components and ongoing simultaneous processes. This model is a revision of the information processing model of memory and learning developed from a computer model metaphor (Atkinson & Shiffrin, 1968). It includes a sensory, working, and long-term memory, all of which must work together to contribute to information perception, encoding, saving, and, ultimately, recalling at a later time. The movement of information throughout the system is a complex process and requires executive functioning. Crick and Dodge’s (1994) interpretation indicates children are always encoding, interpreting, and making responses in a cyclical pattern; at the same time, any one piece of information follows a linear pattern leading to a response. Behavior choices are made based on a complex interplay of internal and external cues that are uniquely interpreted and acted upon. Based on the cues, goals, and the resulting evaluation of such, a child may act in a socially acceptable manner or engage in aggressive and disruptive behavior. It is believed changes in any component(s) of this system will result in different outcome behaviors. Dodge and Pettit (2003) ultimately concluded the pattern of processing social information over time is a common mediator for many risk and protective factors for
aggressive and disruptive behavior.

Vance, Fernandez, and Biber (1998) identified several protective factors predicting educational progress in a group of high-risk youth. These factors included problem-solving cognitive skills and social competency in the areas of general likeability and ability to get along with peers and adults. Similarly, the presence of a stable, close friendship and prosocial peer group norms influence the development of appropriate social behavior (Deater-Deckard, 2001). Fraser et al. (2005) suggested prevention programs can strengthen social skills and emotion regulation, changing classroom expectations and peer-related behavior by broadening social knowledge to develop more advanced social information processing and decision making skills. School programs for promoting social competence are intended to prevent and intervene in a large range of issues. This includes school safety concerns, gang membership, academic failure and school dropout, substance abuse, delinquency, youth violence and weapons possession, bullying, and sexual harassment (McNamara, 2002). Those children with delayed or impaired social competence often become isolated from their peers. Without the presence of appropriate social skills, many children face multiple difficulties in their lives including academic difficulty, social isolation, and school withdrawal (Sullivan & Strang, 2002/03).

Disruptive Behavior and Social Competence

Children with acting-out behaviors are often described as having poor social skills, including conflict resolution strategies, skills for making and keeping friends, and demonstrating social role flexibility, all components of developing social competence.
Children with delayed social development have been shown to suffer in peer interactions (Dodge, 1989). In comparison to children who do not have friends, children with friends are more likely to avoid problems with peers in school such as bullying. Additionally, the expectations for behavior within a social group moderate the demonstration of aggression and social skills (Deater-Deckard, 2001). The quality of an individual’s social skill development is positively related to their relationships and social experiences.

Children with behavior problems, such as aggression, arguing with authority figures, and refusing to follow directions often have poor life outcomes including; poor academic achievement, the underdevelopment of adaptive behaviors, and negative interactions with the legal system (Greenbaum et al., 1996; Torestad & Magnusson, 1996). Students engaging in acting out behaviors in preschool were found to struggle in many other ways during early elementary school including emotional health, social skills, and attending behaviors (Egeland, Kalkoske, Gottesman, & Erikson, 1990). In addition, children with disruptive behavior also have been shown to have a poor prognosis with regard to later psychopathology (Offord et al., 1992).

Children at a high-risk for the development of psychiatric disorders are more likely to avoid pathology through interventions designed to develop cognitive skills, social skills, and developing relationships with mentors at school (Vance, Fernandez, & Biber, 1998). Social skill interventions promote educational progress when they focus on aspects of likeability and getting along with others. The critical cognitive social skills that work as protections from later psychopathology include perspective taking skills, social
problem solving strategies, and healthy conflict resolution methods. There is a clear relationship between social skill development, social behavior patterns, and life outcomes.

Employers spend a great deal of time and money each year working to train their employees to use social skills specific to the field in which they work. Interacting with bosses, coworkers, and clients in a complex and changing environment requires a level of social competence. Many of the trainings employers provide are called “professional etiquette classes” or “soft skills training” and focus on specific behaviors, including, attending to and responding to others and regulating behavior to convey a specific message. Interpersonal relationships throughout the life span require a level of emotional and behavioral awareness of self and others to be successful. Success also requires an ability to adjust one’s social behavior and respond to others in an appropriate manner. People experience emotions constantly and learning to perceive, understand, and respond to emotions appropriately is critical for social competence and success in life. Appropriate emotional regulation is a significant component of social competence (Wittmer, Doll, & Strain, 1996). The application of social skills is necessary for an individual to function independently and contribute to society as a whole.

Social skills continuously change and competence develops across the entire life span. The specific skills contributing to competence are acquired and practiced in every interpersonal interaction. These skills can become deeply ingrained patterns of behavior, whether they are healthy or maladaptive in nature (Crick & Dodge, 1994). However, social skills can be directly taught and behavior patterns altered to fit the
developmentally appropriate behavioral expectation.

The link between children with emotional or behavioral disorders and children’s social competence is apparent. Children with various psychopathologies often have poorly developed social skills leading to peer rejection, social withdrawal and peer interaction avoidance, the socialization of deviant behavior, and internalizing problems (Deater-Deckard, 2001). The relationship also may be the reverse; negative interactional patterns with peers can lead to the development of inappropriate social skills, ultimately influencing the potential for psychopathology. Children who experience social exclusion by their peers also have high levels of personal unhappiness, loneliness, and feelings of being socially rejected (Dodge, 1989). Peer problems and rejection in childhood have been found to be associated with early adulthood problems of depression and drug use (Reinherz, Giaconia, Carmola Hauf, Wasserman, & Paradis, 2000) and externalizing problems (Woodward & Fergusson, 1999).

Social competence is an important life skill for many reasons. The ability to function in social situations allows a person to attain personal goals and assist others in their goals. Additionally, working well with others allows one to attain and hold employment, establish and maintain social relationships, and understand and express emotional experiences appropriately (McNamara, 2002).

**Externalizing and Internalizing Behaviors**

Children’s behavioral symptoms are frequently conceptualized as occurring along two broad factors, externalizing and internalizing. Achenbach (1966; as cited in Achenbach & Edelbrock, 1978) conducted early factor analyses of child behaviors,
labeling the resulting two broad components as externalizing and internalizing behavior. Previously, according to Achenbach and Edelbrock (1978), authors had been working within roughly similar frameworks but called the factors by other labels, such as over-controlled and under-controlled behavior and conduct versus personality problems.

The terms externalizing behavior and internalizing behavior describe a critical division of behaviors that are applied to describing psychological disorders (Kamphaus & Frick, 2002) and for communicating and understanding variations in behavior. Children divided into these two subgroups according to their dominant behaviors demonstrate significantly different psychological profiles leading to the use of these groupings on popular behavioral and personality assessment measures (e.g., Children’s Behavior Checklist; Achenbach, 1991; and Behavior Assessment System for Children; Reynolds & Kamphaus, 1992). Children with internalizing behaviors were described as over-controlled, inhibited, anxious, and shy. Children with externalizing behaviors tended to be aggressive, act-out, and have conduct problems (Edelbrock, 1979). Externalizing-type behaviors are the focus of this study.

On the pathological extreme of the externalizing, or disruptive, behavior continuum are the diagnoses of Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD). These diagnoses describe individuals whose negative behavior patterns have intensified to a degree which interferes with social, academic, or occupational functioning. The behavior patterns are negative, hostile, and defiant in nature and may include the violation of basic rights of others or typical social norms (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision [DSM-IV-TR], 2000).
Children displaying disruptive behavior in the form of less severe patterns of aggressive behavior and fewer prosocial acts have a diagnostic profile similar to those identified with these ODD or CD, as these behaviors are similar to several of the diagnostic criteria, but they may not meet all of the criteria. Disruptive behavior disorders are a continuum of behaviors that fall under the externalizing behavior construct.

One of the components of disruptive behavior and the externalizing factor studied at length is aggression. The term aggression has been used widely within clinical and theoretical writings of human behavior; but, there has been little agreement on a precise operational definition due to the difficulty of defining aggression. There is consensus the difficulty is due to the social judgment required to label an act as aggressive. This judgment is based on knowledge surrounding the history and context of the situation, the individuals involved, the motivation behind the act, and whether the behavior is a justified reaction (Cairns & Cairns, 2000). If subjective judgment can be reduced by providing an operational definition for aggression, the interrater reliability of measures of aggression will increase (Rotter & Wickens, 1948). Therefore, operational definitions of aggression reduce the difficulty in identifying aggressive behavior but it does not lead to easier conceptual definitions for aggression.

Aggression, along with other disruptive behaviors, has been conceptually defined both as a unitary concept and as a concept that is multi-determined. The unitary definition applies when described as a latent characteristic or personality trait (Moffitt, 1993). This suggests there is a stable underlying “syndrome” that is expressed with changing behavior for different developmental stages. Alternatively, aggression is
defined as having multiple phenomena and multiple constructs (Cairns & Cairns, 2000). This approach suggests the relative situation determines aggressive behavior. The concrete, observable events must be used to understand the concept of aggression because each behavior has a function with antecedents and consequences.

Several considerations must be made to develop a definition of aggression (Cairns & Cairns, 2000). Limiting the definition to specific behaviors limits the developmental nature of the concept of aggression. This is because aggressive behavior changes with different developmental levels (e.g., grabbing and pushing in preschool to gang-related fights in adolescence.) A specific definition must include the inherently social nature of aggression. Aggression is done by one person/group and requires a recipient(s) to be aggressive. Additionally, aggression definitions typically include “intent to act”, but the motivation and intention for a behavior is difficult for an observer to determine. When the outcome is considered, aggression includes a wide range of distinct behaviors because they all result in the same outcome (e.g., social exclusion). Additionally, aggressive behavior includes overt verbal and physical actions in addition to indirect aggression based on relational or social actions. Relational aggression consists of harming others through social relationships (Lagerspetz & Bjorkqvist, 1994). Early research on hostility statistically identified subclasses of hostile, or aggressive, behavior as the following: 1. Assault, 2. Indirect hostility, 3. Irritability, 4. Negativism, 5. Resentment, 5. Suspicion, and 6. Verbal hostility (Buss & Durkee, 1957). This supports the multifaceted approach to conceptually defining aggression.

Additionally, the construct of aggression is either reactive or proactive (Sutton,
Smith, & Swettenham, 1999a). Reactive aggression occurs in negative emotionally charged relationships, whereas proactive aggression occurs when someone may act in a cold and calculating manner to obtain a particular outcome. Proactive aggression (e.g., engagement in manipulative bullying) requires a high level of social cognitive skills to process and manipulate situations successfully (Smorti & Ciucci, 2000; Sutton, Smith, & Swettenham, 1999b). Therefore, within the social information processing model presented by Crick and Dodge (1994), there is a difference in the cognitive processing to explain for the tendency to make behavioral choices that are aggressive despite the child’s possession of social skill knowledge. Children who engage in proactive aggression are accurate at perceiving and interpreting social cues and are aware of appropriate social skills; however, they differ from others in goals, strategies, and ultimately, their behavioral decision. This difference may be the result of the value placed on the rewards associated with aggression versus the negative outcomes (i.e., a costs and benefits analysis; Sutton, Smith, & Swettenham, 1999b) or that aggressive children possess more hostile knowledge structures (Burks, Laird, Dodge, Pettit, & Bates, 1999). Smorti and Ciucci (2000) examined the different narrative stories developed by bullies and their victims when interpreting social situations, concluding it appeared each group utilized different scripts based on their real-life experiences. Conversely, reactive aggression is the stereotypical bully, with weakness in social intelligence but physically strong and emotionally reactive (Sutton, Smith, & Swettenham, 1999a). These individuals do not read social cues well and do not know basic social skills that may help avoid aggression. This type of aggression may respond better to social skills training
interventions rather than the proactive aggressor who is already skilled at interpreting and manipulating social situations. As a result, successful interventions for aggression must take into account whether the aggressor lacks the needed social skills or if they process social information differently due to different values and goals.

The specific disruptive behavior of bullying is different from other forms of aggression in that it occurs repeatedly (Olweus, 1993). The repetitive nature of bullying leads to the potential for its effects to have greater significance on the participants over time. Over the long-term there is a negative impact on bullies and their victims. For example, children who are bullies are more likely to become involved in gangs or other criminal activity (Cairns, Cadwallader, Estell, & Neckerman, 1997; Kumpulainen et al., 1998) or become involved in excessive drinking and substance use (Kaltiala-Heino, Rimpela, Rantanen & Rimpela, 2000). On the other hand, children who are victims of bullies are likely to express or attempt suicide (Kumpulainen et al., 1998; Pellegrini, 1998), suffer from anxiety (Steven, Van Oost, & Bourdeaudhuij, 2000), view school as an unhappy place and therefore are often absent (Kumpulainen et al. 1998), or display behavior problems themselves (Pellegrini, 1998). Evidence of bullying has been observed across age groups, including at the kindergarten level, the behavior patterns involved in kindergarten bullying is similar to that of older students (Perren & Alsaker, 2006).

**Etiology of Disruptive Behavior and Aggression**

The etiology and course of antisocial behavior, specifically including, aggressive behavior, in childhood and adolescence is determined by multiple factors. However, it
appears to have a general, stable developmental pathway with predictable risk and protective factors that combine in unique ways leading to various behavioral trajectories of different maladjustment levels (Dodge & Pettit, 2003; Lahey & Loeber, 1994; Patterson, DeBaryshe, & Ramsey, 1989; and Tolan, Guerra, & Kendall, 1995;). The development of conduct problems in childhood is closely associated with specific variables in the social environment, family, school context and academics, and individual dispositions.

Risk and protective factors increase or decrease a child’s risk for engaging in socially maladaptive behavior, including aggression. Schwartz and Proctor (2000) described the pathway between direct violent victimization in the community, emotional regulation difficulties, and eventual social difficulties with peers. They also described the pathway between witnessing violent incidents, cognitions of aggression as an appropriate response, and acting aggressively. Children who engaged in aggressive acts in first grade had difficulties in third grade in relation to behavior, academic, and social adjustment (Flanagan, Bierman, & Kam, 2003). Greater numbers of risk factors combined with fewer protective factors leads to a greater risk for later social maladjustment (Torestad & Magnusson, 1996).

Familial risk factors include specific parenting practices, such as harsh and inconsistent discipline, little positive parental involvement with a child, negative reinforcement of chronic conduct problems, limited problem-solving skills in the family, and poor monitoring and supervision (Dodge & Pettit, 2003; Patterson, DeBaryshe, & Ramsey, 1989). For children with conduct problems, there is a high rate of parents with
marital problems, depression, antisocial personality disorder and substance abuse (Frick, Lahey, Loeber, Stouthamer-Loeber, Christ, & Hanson, 1992). There is an increased risk of disruptive behavior in children when the behavioral expectations of parents do not match the behavior demonstrated by their child (Paterson & Sanson, 1999). The disruptive behavior parents try to reduce in their children is often unintentionally reinforced via ineffective and inconsistent parenting strategies (Patterson, 1997). Additionally, these families fail to reinforce prosocial behavior resulting in the development of greater amounts of disruptive and aggressive behavior (Forgatch & Patterson, 1998). Parental permissiveness for aggressive behavior in young children can lead to bullying behavior (Olweus, 1995). There is a correlation between families with socially active parents and children who are more socially accepted by their peers and more prosocial in their behavior toward peers (Krantz, Webb, & Andrews, 1984). This supports the role of observational learning theory; children acquire the skills demonstrated by their parents in real-life social situations. Additionally, inter-parental congruence and high parent-child responsiveness is related to a child’s social competence with peers (Lindsey & Mize, 2001).

In the social peer environment, children who demonstrate disruptive behavior are more likely to experience: rejection from the non-aggressive peer group, poor academic achievement, and have antisocial peer group expectations (Deater-Deckard, 2001; Patterson, DeBaryshe, & Ramsey, 1989). Antisocial peer group expectations and larger cultural norms regarding the acceptability of aggression and the value placed on respect and honor are interconnected with exposure to violence in the environment,
the media, and the availability of weapons (Dodge & Pettit, 2003). Children with peer
difficulties benefit by having a stable relationship with a friend which potentially assists
in the development of self-efficacy regarding relationships (Deater-Deckard, 2001) and
may be a protective factor to disruptive behavior and aggression. Kindergarten and
preschool children identified as aggressive have difficulty entering into social situations.
These children are more likely to try to enter social relationships in disruptive ways such
as initially interrupting or crowding between others. Although aggression may not be
used initially to engage with others, aggressive children were more likely to engage in
aggression following unsuccessful attempts (Wilson, 2006).

There is strong evidence supporting that academic performance and chronic
conduct problems have a significant negative correlation (Dodge & Pettit, 2003).
Patterson, DeBaryshe, and Ramsey (1989) indicated a potential bidirectional
relationship between academic failure and antisocial behavior as a better explanation
than a causal relationship with a specific one-way, directional influence. School
interventions designed to reduce aggressive behavior in students may lead to increased
academic achievement (August, Realmuto, Hektner, & Bloomquist, 2001) implying a
strong relationship between the variables and indicates academic progress may also
provide a potential protective factor to conduct problems in school. Time on task is a
protective factor because of the direct relationship between student time on task and
student academic achievement (Brookover, Erickson, & McEvoy, 1997). Additionally, the
development of communication skills via reading, writing, speaking, listening, and
artistic expression allows for the development of emotional vocabulary and cognitive
function necessary for the appropriate application of social skills (McEvoy & Welker, 2000).

After accounting for various risk and protective factors, several models also present a developmental trajectory to behavior problem development in children and adolescence and often divide these children into groups of “early- and late-starters” or emergence in childhood or adolescence (Lahey & Loeber, 1994; Patterson, DeBaryshe, & Ramsey, 1989). Patterson, DeBaryshe, and Ramsey (1989) proposed that the risk of becoming a chronic offender of criminal behavior increases with the decreasing age of the first severe disruptive behavior incident. Hence, the younger children engage in their first criminal act, the greater the chance of recidivism. Lahey and Loeber (1994) referred to the development of increasing intensity and frequency of disruptive behaviors as a process of accretion, adding behaviors without the loss of previous behaviors, with four distinct levels. These include developmentally typical behavior, behavior representative of oppositional defiant disorder, intermediate conduct disorder, and advanced conduct disorder suggesting a developmental pathway for increasingly disruptive behaviors.

An important influence on the frequency of aggression in school is the accepted normative value of aggressive behavior (Boxer, Mush-er-Eizenman, Dubow, Danner, & Heretick, 2006; Henry et al., 2000). As the normative group expectations change to discourage aggressive behavior, the incidence of aggression decreases. The stability of these norms increases over time; as a result, interventions focusing on social standards may have more effect on younger children (Henry et al., 2000). This would imply that
programs to decrease aggression in schools should focus on the normative value of aggression among both aggressors and the bystanders.

**Disruptive Behavior in the Educational System**

School systems are required to have plans in place to prevent and reduce violence to support the safe learning environment emphasized by the No Child Left Behind Act of 2001 (P.L. 107-110). These plans typically address how the school system will work both proactively and reactively to reduce behavioral disruptions to learning. A proactive approach describes methods to recognize and encourage family and community involvement in safety and the educational process, student prosocial behavior and investment in the school community, and recognizing potential problem situations before they arise. This includes many of the positive behavior support systems currently in place and being introduced to school systems. A reactive approach occurs when schools address violent acts as they occur. This includes disciplinary programs and interventions with the perpetrators or the observers of violent and disruptive behavior. In systems overwhelmed by ongoing disruptive behavior, a great amount of time is spent in the reactive portion of these plans; potentially leading to difficulty with implementing proactive plans because of a lack of resources. Teachers report the presence of aggression in the classroom interferes with their teaching and welcome specific programs or training to address conduct problems in school (Boxer et al., 2006).

Plans to prevent and reduce violence vary widely in their approach and technique. School principals report a variety of approaches to preventive efforts and
these were often different based on the school level (primary, middle, and high schools), location (city, urban fringe, town, and rural areas), perception of community crime level, and percentage of minority enrollment (Jekielek, Brown, Marin, Lippman, & Institute of Educational Sciences, 2007). Overall, a majority of principals surveyed indicated they allowed a variety of disciplinary policies including out of school suspension, transfer to a specialized school for disciplinary reasons, removal for the remainder of the school year, cooperative work between parents and schools to develop school policies, and parent training for student problem behaviors. These procedures were in place to address a range of behavior concerns. Results of the 2005-06 School Survey on Crime and Safety (SSOCS: 2006) suggested principals reported a number of disciplinary problems occurring on their respective campuses (Nolle, Guerino, & Dinkes, 2007). The following “Happens daily or at least once a week” at these rates: student racial/ethnic tensions 2.8%, student bullying 24.5%, student sexual harassment of other students 3.5%, student verbal abuse of teachers 9.5%, widespread disorder in the classroom 2.3%, and student acts of disrespect for teachers 18.3%. The following occurs on campuses at these rates “At all”: gang activity 16.9% and cult or extremist group activities 3.7%.

The need for discipline and more control in school has consistently been among the top concerns of Americans regarding public schools (Bushaw & Gallup, 2008). Male students engage in disruptive behavior in school more frequently than females and are more likely to receive discipline referrals and face a range of disciplinary actions (Skiba, Michael, Nardo, & Peterson, 2002). Ethnic minority, particularly black, students
experience office referrals and exclusionary discipline more often than white students (Rausch & Skiba, 2006; Skiba et al., 2002); however, evidence does not suggest they engage in more frequent or intense disruptive behavior, even after accounting for socioeconomic status (Skiba et al., 2002).

**Discipline in the Educational Setting**

Historically, discipline in school settings has relied on varying degrees of focus on prevention, correction, and remediation. In nineteenth century schools in the United States, behavior standards were based on the memorization of moral teachings, the instillation of a fear of punishment, and a sense of shame for poor behavior (Bear, 2008). The use of physical punishment and teaching of Biblical scripture decreased in the early twentieth century. It was replaced with character education and focused on democratic ideals. Character education was presented didactically through memorization of descriptions of the behavior expectation and indirectly through the development of character traits through practice in clubs and organized activities. A range of methods for correcting behavior began to be implemented including time-out, positive reinforcement, and exclusionary techniques such as suspension and expulsion. Simultaneously, alternative programs to address the concerns of children with serious behavior problems began to emerge (McClellan, 1999). School systems and legislative bodies have attempted to develop improved policies and procedures regarding discipline in school as the awareness among the general public has increased. Various programs and methodologies stress the three components to different degrees.

Schools have a mandate to maintain a safe and orderly environment and must
provide rules of conduct to be followed by students. Additionally, if these rules are not followed, schools have the obligation to impose consequences through disciplinary procedures. Case law requires the rules and consequences meet certain standards. The rules and consequences must be clear and understood by students and families, be applied in a fair and consistent manner, and have a school-based rationale. Furthermore, if the consequences or disciplinary procedures involve suspension, students are provided with a form of due process in the form of notice and the opportunity to explain their version of the facts (Yell & Rozalski, 2008). Beyond the legal requirements for discipline policy, there is growing public acceptance for the broader need to teach the appropriate standards of social behavior (McClellan, 1999). Since the mid-twentieth century when moral education in the public school system was least popular in the United States, it has seen an increase in support and legislation requiring various forms of character education.

Comprehensive disciplinary procedures aim to stop misbehavior, prevent or reduce the likelihood of the misbehavior recurring, and replace the misbehavior with an appropriate alternative (Bear, 2008). Unfortunately, this is often linked with controversial punitive strategies that do not address all three aims, such as suspension and expulsion. Suspension and expulsion are often a short-term change in behavior that does not teach replacement behaviors or address contextual factors for the misbehavior. Schools with higher rates of the use of out of school suspension and expulsion have lower passing rates on state standardized achievement tests, even after controlling for poverty rates and race distribution (Skiba & Rausch, 2004).
A pervasive zero tolerance approach is the application of punitive and exclusionary discipline strategies in response to student misbehavior. The main goal of this approach is to control student behavior to maintain order and safety in a manner that has popular appeal (Bear, 2008; Skiba & Rausch, 2006). The philosophy of zero tolerance is based on three broad assumptions: school punishment is a deterrent for misbehavior, the removal of students who misbehave will improve the school climate for other students, and failure to punish will promote misbehavior in other students. Restriction of access to education and the opportunity to learn is the most extreme form of punishment a school may administer (Skiba & Rausch, 2006). As a result, broad application of zero tolerance procedures can be controversial when applied to a range of behaviors rather than restricted to the most extreme forms of disruptive behavior. This is particularly true when data on these procedures reveals there is little evidence that zero tolerance makes a contribution to school safety or improved student behavior (Fenning & Bohanon, 2006; Skiba, Michael, Nardo, & Peterson, 2002; Skiba & Rausch, 2006).

In response to evidence that discipline techniques involving removal had little efficacy, research efforts and school panels have focused on identifying alternative methods of maintaining order and safety. In particular, prevention-based strategies and models have emerged with varying degrees of data-based support (PBIS Home, 2007; see also Greenberg et al., 2003; Mihalic, Irwin, Elliott, Fagan, & Hansen, 2001). Despite this change in perspective, removal from the school environment through suspension and expulsion, in a reactionary manner, rather than the proactive prevention techniques
recommended, remains the most widely used discipline procedure used (Fenning & Bohanon, 2006; Skiba & Rausch, 2006). One model, Positive Behavior Support, is based on teaching the appropriate behavior in a proactive and prevention-oriented manner on a systemic level. Recently, these programs have shown success at reducing office discipline referrals, increasing instructional time, and improvement of school climate (Ervin et al., 2007; Fraser et al., 2005; Greenberg et al., 2003; Sugai & Horner, 2002; Warren et al., 2006). Additionally, the implementation of a positive behavior support model is consistent with the requirements of the Individuals with Disabilities Improvement Act (IDEA 2004) requirement for Response to Intervention problem-solving approaches in the school environment (Sugai, 2008).

The growing public approval of character education supports the trend in schools to develop proactive strategies for developing positive student behavior, most recently as described by the U.S. Office of Special Education Programs National Technical Assistance Center on Positive Behavioral Interventions and Supports (2007). Positive behavior support applies behaviorally-based approaches to the development of a district-, school-, classroom-, and nonclassroom- (hallway, cafeteria, etc.) -wide continuum for behavior support. It uses primary, secondary, and tertiary systems of support to reduce the incidence and intensity of problem behaviors and increases the occurrence of appropriate behavior. The basis for the development of these systems is clearly described standards of behavior. Schools with consistent enforcement of understood and accepted discipline policies have been consistently correlated with lower levels of student disruption (Brown & Beckett, 2006).
School-Based Intervention Programs

Despite the growing time and resource restrictions, schools have developed and implemented a range of interventions to address student disruptive behavior. These programs differ along many variables, including theoretical orientation, level of inclusion within the regular curriculum, and the length of time the program is present. Among the programs publicly available for school adoption, only some have been empirically validated (Eyberg, Nelson, & Boggs, 2008; Mihalic et al., 2001; PBIS Home, 2007). Many of these programs are behavioral in nature stressing the selective reinforcement and punishment of appropriate and disruptive actions but many also stress the importance of the social-environmental conditions in the school, home, and community and the developmental nature of the behaviors being addressed.

Interventions that are designed to decrease engagement in aggressive or other deviant behaviors and to promote social competence frequently focus on specific skills to replace the inappropriate behavior. This may include teaching and practicing various social skills or emotional understanding and regulation, or focusing on specific components of the social-cognitive process and environmental influences (Erdley & Asher, 1999). Specifically, social-cognitive components may include a focus on an individual’s attribution of others’ intentions, beliefs about the legitimacy of aggression in social interactions, social goals, and problem-solving skills. The focus on these cognitive processes occurs within the context of developing social skills based on changed cognitions. Additionally, changes are most successful when the environmental context in which interventions occur is accounted for. The environmental influences for
the development, maintenance, or inhibition of these processes are critical for successful change. Additionally, the multitude of risk factors for disruptive behavior across a variety of developmental domains and contexts indicates the need for effective broad-based interventions (Tolan, Guerra, & Kendall, 1995). These difficulties rarely are resolved without assistance and their presence is costly to children and their families, but also costly in an indirect fashion to society because of the continued need for services and the loss of potential contributions from these individuals (Greenbaum et al., 1996).

From the positive behavior support perspective (Ervin et al., 2007), specialized interventions to address specific groups or individuals are typically at the secondary and tertiary level of school programs intended to focus on specific groups of students or individuals at a greater risk level or with a history of poor response to the current programs intended for school or classroom-wide use. They may consist of small group treatments consisting of counseling, skills training, and/or group behavior modification treatments or more intensive day-treatment style programs.

Interventions that provide specific skills training (e.g., social skills, progressive muscle relaxation, building relationships) in isolated situations with small or no connection to the natural environment, for guided practice or reinforcement of skills, have limited success over time (Cirrillo et al., 1998; Lopata, 2003; Tiffen & Spence, 1986). These programs sometimes offer improvement in specific areas of functioning or may demonstrate short-term effectiveness; however, the evidence does not suggest long-term, broad behavioral improvement. This is potentially due to the complexity of
disruptive behavior. Students with ongoing behavior problems likely have a combination of risk factors, few protective resources, and disruptive habits that have been successful in the past for acquiring desired outcomes. These training groups likely are successful at helping students acquire knowledge, but do not provide assistance at changing the environmental conditions in which the disruptive behavior occurs or address the developmental nature of disruptive behavior.

In an attempt to expand their effectiveness, some interventions provide feedback for students regarding their performance in the natural environment and provide information or consultation with teachers and parents regarding the behavior intervention (Bry, 1982; Hawken, MacLeod, & Rawlings, 2007). These interventions show greater effectiveness at decreasing disruptive behavior, including office discipline referrals and criminal behavior.

Broad-reaching programs with coordinated prevention and intervention efforts appear to have the greatest effect on the greatest number of students. Full-spectrum intervention efforts that are developed based on the needs of a specific group that is not responding to prevention programming and is supportive of the primary prevention framework demonstrate greater effectiveness than isolated programs. These programs provide direct training and practice for the child, consultation and/or training for school personnel and parents, and connections to community resources. These school-based interventions have been shown to be effective at reducing aggression, office discipline referrals, and parent reports of behavior problems. They also increased perceived social competence, social and emotional coping skills, improved peer relations, healthy
parent-child interactions, and academic achievement (August et al., 2002; Conduct Problems Prevention Research Group, 1999a, 1999b; Ervin et al., 2007; Robinson & Rapport, 2002).

The risk factors associated with disruptive behavior in schools are based in a variety of areas, including the individual and throughout family, school, and community systems. This increases the complexity of the treatment required to intervene. Isolated interventions that address only one component of risk for disruptive behavior, such as, a social or academic skill deficit or the parent-child relationship, have limited influence on disruptive behavior. A multidisciplinary, ecological approach to behavior and mental health in children is necessary to effect change. Effective programs strive to improve all children’s motivation and social skills, create positive school environments that recognize adult and child positive behavior, include parental participation to teach effective child-rearing methods, provide links to community assistance sources, including health services and child care, and create social networks (Heathfield & Clark, 2004; Zigler, Taussig, & Black, 1992).

Alternative settings as a discipline placement are an option used by schools when suspension does not produce a reduction in a specific student’s behavior problems. These settings restrict access to the general population of students but allow access to instruction. This attempts to limit one of the criticisms of exclusionary discipline by continuing a child’s access to academic instruction despite removal from the general student body. The goal of this evaluation is to determine whether a discipline program designed to provide instruction in appropriate behavior and continue
a child’s academic instruction while restricted from the general school population is a successful alternative. The overall goal is to reduce future discipline referrals and to increase the children’s academic performance. This program focuses on the acquisition of social skills and the skill of appropriately applying these skills based on problem-solving techniques taught through didactic instruction, discussion groups, and role play. The goal is for students to learn replacement behaviors they can use as an alternative to the disruptive behaviors in which they previously engaged. The program is successful if students are able to participate in the general school population without behaving in a disruptive manner.
Participants

Participants in this program were 57 students who entered and exited the program during the 2006-07 and 2007-08 academic years. This program served elementary school students (kindergarten through fifth grade) in a large suburban school district in the south. Upon entering the program, three were in kindergarten, 18 were first grade, 18 were second grade, three were third grade, five were fourth grade, and ten were fifth grade students. Fifty students were male (87.7%) and seven were female (12.3%). Ethnic distribution was as follows: nine students were White (15.8%), 33 were African American (57.9%), 13 were Hispanic (22.8%), and two were Asian (3.5%). Forty-two (73.7%) of the students’ home campuses were designated as Title I Federal funding eligible and fifteen (26.3%) were not from Title I eligible campuses. A control group consisted of 57 students from the same school district that matched participants on the following characteristics: grade level at the time of program enrollment, ethnicity, sex, and home campus.
### Table 1

Frequency count of program participants by grade and ethnicity

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<td>4</td>
<td>12</td>
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</tbody>
</table>

To select students for the control group, students meeting each of four criteria (home campus, grade level, gender, and ethnicity) in the school district were identified and then randomly selected until the specified number was reached. Matching was used due to the differences between the program participants and the general student population in this district. As of September 2008, the school district’s ethnic distribution was approximately 16% African American, 38% Hispanic, 37% White, 9% Asian, and less than 1% Native American. Thirty-seven percent of students in the district received free
or reduced meals and 35% of the elementary schools were designated as Title I federally funded schools. Data from the control group for each of the measures were collected for the same time periods as the student to whom the control group participant was matched. For example, if a student participated in the program from the start of the fourth grading period during the 2006-2007 school year through the end of the fifth marking period, data for the measures were collected on that student and his/her matched control for the first, second, and third marking period of 2006-2007 and then the sixth marking period of 2006-2007 and the first and second marking periods of 2007-2008.

Students were not included in the study if they did not attend the program for a minimum of 50 school days, if they withdrew from the program due to leaving the school district, or if they entered the program prior to the 2006-2007 school year or exited the program after the 2007-2008 school year. By restricting the sample in this way, complete data records were available for all of the participants in this study. Furthermore, attendance for 50 school days was the minimum time required to reach Level 6 (the final level) to attain “graduate” status. Participants in this study attended the program for a mean of 90.5 days ($SD = 18.7$). Thirty-five (61.4%) students attained graduate status in the program by meeting behavioral criteria to “pass” for at least fifty days and twenty-two did not graduate prior to exiting the program.

**Description of the Program**

The program was a disciplinary alternative education placement for elementary aged children. Students were referred to this program as a result of behaviors that
required a disciplinary removal from the home campus according to the school district Code of Conduct. In addition, there were discretionary placements for persistent misbehavior of lesser intensity, however, administrators from the home and program campus must provide evidence that positive behavior supports and less restrictive discipline options have been exhausted prior to placement. The length of placement in the program is based on a combination of factors: the violation(s) and circumstances surrounding it, state legal code requirements for minimum and maximum length, the discipline administrator, campus counselor, and programming director’s discretion, and the student’s successful completion of the program requirements. A minimum of 50 successful days is required for students to achieve Level 6, which is graduation status.

According to the program’s Statement of Philosophy, the purpose of this program was to provide differentiated instruction for behaviorally at-risk students. It was intended to provide an alternative instructional environment to help children develop the coping skills to succeed in the regular educational environment. It used problem solving instructional strategies and a strict behavior management system to challenge students academically and socially. In addition to the standard elementary academic curriculum, social skills lessons were incorporated into each school day during which students discussed, role played, and engaged in cooperative problem solving related to typical social scenarios or specific skills to be developed, such as “listening,” “following directions,” and “honesty.” As such, students were responsible for the same academic curriculum as their same-grade peers not participating in the program but also participated in additional curriculum focusing on their behavior performance in the
school environment.

The program implemented a system of levels, each of which was achieved by meeting specific behavioral criteria at varying levels of responsibility and associated rewards. Students entered the program on Level 1 and could gradually advance to Level 6. The same behaviors were monitored at each of the levels, however, the required performance of the behaviors increased with each level. Each level was a minimum of 10 school days before a student could progress to the next level with the exception of Level 6, which required 20 school days; however, any student who passed Level 5 into Level 6 was considered a graduate upon leaving the program. The additional days spent in the program at Level 6 were intended to provide time to practice the newly acquired skills while maintaining the supervision and support provided by the program staff. As students progressed within the levels, they were granted access to more activities with greater appeal and were given more freedom with the classroom and school environment.

The broad behavioral goals identified and tracked on an hourly basis in the program included (a) work on task, (b) maintain self-control, and (c) speak politely and respect others. The goal “work on task” required a student to (a) remain in appropriate location, (b) complete assignments in class, (c) work on task silently, (d) pay attention and listen to speaker, (e) bring appropriate materials and assignments to class. The goal “maintain self-control” required the student to (a) follow directions and participate appropriately, (b) accept responsibility for own behavior- admitting, tattling, (c) accept correction and disagree appropriately. The goal “speak politely and respect others”
required students (a) be courteous, (b) keep hands, feet, etc., to self, (c) get teacher’s attention appropriately. Each student had a chart monitoring their performance on each of the goals for each day. These charts provided information regarding whether a student “passed” the day and was able to proceed to the next day or must repeat the day.

A student was tracked for each of the above behaviors on an hourly basis. Their performance determined whether they earned “points” toward passing the day and various incentives available throughout the day. Incentives included being identified as “The Man” or “The Woman” for the day, receipt of tickets to be traded for prizes or special privileges, mystery poster, mystery motivator, fun Friday participation, certificates, positive phone calls home, bonus points (toward the day’s points), Zone of Success, and various activities (e.g., shooting baskets). In addition, accumulating negative behaviors led to consequences such as not earning points toward the day, loss of privileges, time in isolation or regroup, and in extreme circumstances, loss of previously earned levels (e.g., acts of physical aggression). The number of negative behaviors prior to earning a consequence depended on a student’s level. As students progressed to higher levels, higher percentages of appropriate behavior were required to “pass” the day and less “warnings” were given prior to earning a consequence.

Counseling services were provided to the students throughout participation in the program. Students participated in a minimum of two sessions with a counselor each week, one of which was individual and the other in a group setting. Counseling sessions utilized books, puppets, role play, and drawing, among other techniques. The
techniques used and goals addressed were individualized for each child’s needs as determined upon entering the program and modified if a child’s needs changed during their attendance. Common themes to these counseling sessions addressed feelings related to school and friends, coping skills for different emotional states, and personal responses to environmental circumstances that influence school behavior. Additionally, guidance lessons were presented to the students one time each month; they were 20 to 45 minutes in duration and included topics such as handling feelings, handling anger, conflict resolution, career identification, college day/financial aid awareness, test and stress management, “The Who” program (anti-victimization education), peer pressure, and tolerance.

For the families of students participating in the program, program counselors ran parenting classes one time each month. These classes included lessons from “Common Sense Parenting,” addressed communication between the home and school, and other topics as requested by families or as identified as areas of need by program staff. Each lesson lasted approximately ninety minutes, free childcare was offered during the lesson, and food was provided to participants. These lessons were not required for students to “graduate” from the program but they were strongly encouraged.

In this evaluation, it was assumed the students attending this program received and participated in the interventions as intended. This program had three locations and, therefore, it must be assumed that staff members at each campus presented the program in a similar manner. Each of the program teachers were certified teachers and were provided with extensive training in behaviorally-based interventions and the
program policies and procedures.

Students entered and left the program at individually determined times based on their behavior and program progress; as a result, they had different experiences in the program based on other students’ influence on the classroom and the various events that occurs during a school year (e.g., one week spring break vacation at the beginning, middle, or end of placement). A student may be the only student in attendance or be one of several students in attendance at any one time; it was assumed that despite similar presentation of the program, there are differences in a classroom environment (e.g., amount of individual attention from teachers, positive and negative peer modeling) when different numbers of students are present.

Measures

**Referring behavior.** Students were referred to this program based on two types of behavior infractions. The first was a mandatory placement in which the student engaged in a single serious incident. These infractions included drug and weapon violations and aggression resulting in serious bodily injury. The second referral was a discriminatory placement at the discretion of school administrators. These occurred when students engaged in persistent misbehavior that did not respond to traditional forms of discipline or behavior interventions at the home campus.

**Program attendance.** Program attendance was coded as the actual number of school days participants were enrolled in and in attendance for the program, regardless of their behavioral performance. Participants attended the program for varying numbers of school days, determined by students’ reasons for referral, but a minimum of 50
passing days to attain Level 6 was required for graduation.

Level of success. Graduation from the program was determined by successfully attaining the final level (Level 6) prior to exiting. Students’ level of success upon exiting the program was assessed as the number of days passing in the program, regardless of the number of actual school days required to reach that level, with a greater number of days passed indicating greater success in meeting the program’s behavior criteria. Each of the levels through level five required 10 passing days and participants have the opportunity to spend 20 passing days at level 6 to practice the new behaviors with supervision and within the structure of the program. Level of success ranged from 0, indicating the student did not pass any days, to 70, indicating the student was successful on all days at all levels 1 through 6. Any number at or above 50 days indicated the student passed sufficient days to attain Level 6 and graduate status. Refer to the level system table, list of classroom rules, and student daily point sheet in Appendix for a description of the behavioral criteria, the varied programming, restrictions, and rewards at each level.

School functioning: school attendance. School attendance was measured by absences from school for the three complete grading periods immediately before and immediately after attending the program. Attendance was coded as the number of days marked absent from school. These days were inclusive of both unexcused and excused absences, but did not include days absent due to suspension or expulsion. Three grading periods was approximately ninety school days and half of a school year. There were six grading periods in each school year. A significant difference in a student’s absence from
school over the three grading periods immediately before and immediately after attending the program would denote a change in school attendance. Each control group student’s school attendance was measured using the same grading periods as the program students to which they were matched.

**School functioning: disciplinary involvement.** Disciplinary involvement was measured using two indicators across three grading periods: the number of days assigned to out-of-school suspension and the number of days assigned to in-school suspension. Partial days of in- and out-of-school suspension were counted as a full day. Three grading periods total approximately ninety school days or half of a school year. There are six grading periods in each school year. A significant difference in days of in- and out-of-school suspension over the three grading periods immediately before and immediately after attending the program would denote a change in discipline involvement. Each control group student’s disciplinary involvement was measured using the same grading periods as the program students to which they were matched.

**Academic performance.** Academic performance was measured using the average of students’ report card grades in each of the core academic subjects (reading, language arts, math, social studies, and science) averaged across the three grading periods immediately before and after program attendance. Report card grades were given by students’ teachers based on a combination of the students’ performance on tests, quizzes, class assignments and projects, participation, and homework. Grades were given from 0 to 99 with a grade of 70 or above considered passing. Three grading periods include approximately ninety school days or half of an academic school year. A
significant difference in grades over the three grading periods before and after attending the program would denote a change in academic performance. Each control group student’s academic performance was measured using the same grading periods as the program students to which they were matched.
CHAPTER 4

Results

The purpose of this study was to evaluate the outcomes of a discipline alternative education program for elementary students. Outcomes assessed included academic performance, school functioning, and the interaction of outcomes with student grade level and success in the program.

Descriptive Statistics

Means and standard deviations for the outcomes factors, school functioning and report card grades, are shown by grade level in Tables 2 and 3, respectively. Data for school functioning include the total number of days absent from school before and after program involvement, as well as absences for typical reasons and absences due to suspension separated. Absence data for all six marking periods were not available in the school reporting system. Report card grades for six grading periods, three prior to program participation and three after program participation are included. Means of grades are the grades for reading, math, language arts, science, and social studies averaged together.
Bivariate correlations also were calculated among all factors of interest: change in academic functioning, change in school functioning, change in suspensions, change in absences, grade level, and the level of success achieved by a program participant (see Table 4). Significant negative relations were found between change in academic functioning and change in school functioning, specifically change in suspensions, between change in school functioning and grade level, and between change in suspensions and grade level. Additionally, as expected, there were significant positive correlations between change in school functioning and change in suspensions and between change in school functioning and change in absences.

Table 2. Means and standard deviations of school functioning by grade level

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</tr>
</thead>
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<tr>
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<td>12.10 (4.18)</td>
<td>11.00 (6.12)</td>
</tr>
<tr>
<td>Total</td>
<td>15.61 (5.96)</td>
<td>6.85 (6.03)</td>
</tr>
</tbody>
</table>

*Note.* Standard deviations are shown in parentheses for each mean score.
Table 3. Means and standard deviations of academic functioning by grade level

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<td></td>
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<td>(0.28)</td>
<td>(6.09)</td>
<td>(6.90)</td>
<td>(8.57)</td>
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<td>(7.20)</td>
<td>(7.76)</td>
<td>(7.04)</td>
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Note. Standard deviations are shown in parentheses for each mean score.
Table 4. Pearson correlations among changes in academic functioning, school functioning, suspensions, and absences, student grade level, and level of success in the program.

<table>
<thead>
<tr>
<th></th>
<th>Change in academic functioning</th>
<th>Change in school functioning</th>
<th>Change in suspensions</th>
<th>Change in absences</th>
<th>Grade level</th>
<th>Level of success</th>
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</thead>
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<td>Change in academic</td>
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<td>-.583*</td>
<td>.102</td>
<td>.063</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
p < .001            |                      |                |                   |                   |             |                 |
| Change in school     | 1.00                | .934*          | .328*             | -.421*            | .003        |                 |
| functioning          |                      |                |                   |                   |             |                 |
| 
p < .001            |                      |                |                   |                   |             |                 |
| Change in suspensions| 1.00                | -.032          | -.393*            |                   |             |                 |
| 
p = .84             |                      |                |                   |                   |             |                 |
| Change in absences   | 1.00                | -.140          |                   | -.234             |             |                 |
| 
p = .37             |                      |                |                   |                   |             |                 |
| Grade level          | 1.00                |                |                   |                   | .193        |                 |
| Level of success     |                      |                |                   |                   |             | 1.00            |

*Note. n = 43 (listwise); * denotes correlations significant at .05 or better.*
Research Question One: (a) Do participants in the disciplinary alternative education program demonstrate improved school functioning after participation in the program? (b) Do participants in the disciplinary alternative education program demonstrate improved academic performance after participation in the program?

A repeated measures multivariate analysis of variance (MANOVA) was run with school functioning as the outcome factor and time (before/after) as the within subjects factor and participation in program (participant vs. control) as the between subjects factor. Estimated marginal means for school functioning before and after program participation are shown in Table 5. Overall, a significant main effect for time showed that school functioning improved after participation in the program $F(1,105) = 58.89, p < .001$, partial eta$^2 = .359$. Participant students missed an average of 15.77 days of school before the program and 6.85 days after participating in the program. Control group students missed an average of 1.78 before and 1.96 after the program. However, a statistically significant interaction of school functioning with group membership, $F(1,105) = 63.89, p < .001$, partial eta$^2 = .378$, showed improvement only for group participants and not for control group students (see Figure 1).

School functioning was comprised of days absent from school and days assigned to in- or out-of-school suspension. Repeated measures multivariate analyses of variance were run for absences and days of suspension separately to explore whether one or both of these variables accounted for the observed change in school functioning (see Table 5 for estimated marginal means of each outcome). Results indicated a significant difference in days missed due to suspension, $F(1,106) = 93.30, p < .001$, partial eta$^2 =
.468, and an interaction between the days missed due to suspension and the participant and control groups, \( F(1,106) = 88.38, p < .001, \) partial eta\(^2\) = .455 (see Figure 4.2).

Participant students missed an average of 14.64 days of school due to in- or out-of-suspension before the program and 5.40 days after participating in the program. Control group students missed an average of .43 before and .30 after the program. Conversely, there was not a significant change in school absences after participating in the program, \( F(1,105) = .001, p = .97, \) partial eta\(^2\) = .000. Participant students were absent from school for a mean of 1.14 days before the program and 1.44 days after participating in the program. Control group students missed an average of 1.35 before and 1.67 after the program (see Figure 4).

Table 5. Estimated Marginal Means of School Functioning

<table>
<thead>
<tr>
<th>Variable</th>
<th>Participants</th>
<th>Control</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall School Functioning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Before</td>
<td>15.77</td>
<td>1.78</td>
<td>8.78</td>
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<tr>
<td>After</td>
<td>6.85</td>
<td>1.96</td>
<td>4.40</td>
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<tr>
<td>Suspensions</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Before</td>
<td>14.64</td>
<td>0.43</td>
<td>7.53</td>
</tr>
<tr>
<td>After</td>
<td>5.40</td>
<td>0.30</td>
<td>2.85</td>
</tr>
<tr>
<td>Absences</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Before</td>
<td>1.14</td>
<td>1.35</td>
<td>1.24</td>
</tr>
<tr>
<td>After</td>
<td>1.44</td>
<td>1.67</td>
<td>1.56</td>
</tr>
</tbody>
</table>
Figure 1. Estimated marginal means of school functioning before and after the program.

Figure 2. Estimated marginal means of days missed due to suspension before and after program participation.
Improved academic performance was measured using the change in average report card grades (Language Arts, Math, Reading, Social Studies, and Science classes) for the three marking periods before and after program participation. Estimated marginal means for academic performance for both participants and control group students are listed in Table 6. A repeated measures multivariate analysis of variance was conducted to assess whether there were academic functioning differences before and after program participation or group membership differences in report card grades. Multivariate results indicated that there was a significant main effect for group membership, $F(1,62) = 24.71, p < .001$, partial $\eta^2 = .285$, in that control group students’ grades were higher than program participants’. However, there was no main effect for time and no significant interaction of changes in academic functioning with group membership.
membership, $F(5,58) = .464, p = .80, \text{ partial eta}^2 = .038$.

Table 6. Estimated marginal means of academic performance

<table>
<thead>
<tr>
<th>Group</th>
<th>Academic Performance</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Time 1</td>
</tr>
<tr>
<td>Participant</td>
<td>77.02</td>
</tr>
<tr>
<td>Control</td>
<td>84.59</td>
</tr>
</tbody>
</table>

To further explore differences in academic performance, additional repeated measures analyses of variance were conducted to determine whether specific subject area grades had different changes over time. Mauchly’s test of sphericity was significant for Language Arts, math, reading, and science grades indicating the assumption of sphericity was not met, however, it was met for social studies grades. The Greenhouse-Geisser correction was used for all except social studies grades. Estimated marginal means for grades in each subject area before and after program participation for both participants and control group are shown in Table 7.
Table 7. Estimated marginal means of academic functioning for each subject area

<table>
<thead>
<tr>
<th>Subject</th>
<th>Group</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Arts</td>
<td>Participant</td>
<td>78.86</td>
<td>75.10</td>
<td>75.55</td>
<td>78.41</td>
<td>76.97</td>
<td>75.86</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>82.29</td>
<td>82.00</td>
<td>83.62</td>
<td>82.56</td>
<td>82.12</td>
<td>82.56</td>
</tr>
<tr>
<td>Math</td>
<td>Participant</td>
<td>75.17</td>
<td>72.72</td>
<td>71.48</td>
<td>72.79</td>
<td>74.45</td>
<td>73.93</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>84.71</td>
<td>82.12</td>
<td>81.47</td>
<td>82.29</td>
<td>81.71</td>
<td>82.06</td>
</tr>
<tr>
<td>Reading</td>
<td>Participant</td>
<td>75.38</td>
<td>73.17</td>
<td>72.83</td>
<td>75.97</td>
<td>74.79</td>
<td>74.14</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>84.29</td>
<td>82.27</td>
<td>83.91</td>
<td>81.65</td>
<td>81.44</td>
<td>82.38</td>
</tr>
<tr>
<td>Science</td>
<td>Participant</td>
<td>78.83</td>
<td>75.62</td>
<td>75.66</td>
<td>78.31</td>
<td>74.28</td>
<td>75.24</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>85.85</td>
<td>84.59</td>
<td>85.29</td>
<td>85.91</td>
<td>83.68</td>
<td>84.71</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Participant</td>
<td>78.79</td>
<td>73.59</td>
<td>78.79</td>
<td>79.31</td>
<td>76.38</td>
<td>79.69</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>85.79</td>
<td>84.85</td>
<td>86.53</td>
<td>86.32</td>
<td>83.12</td>
<td>86.27</td>
</tr>
</tbody>
</table>

It should be noted first, that for each subject area, there was a significant main effect for program membership in that control group students had higher grades than participants both before and after program participation: for language arts, $F(1,61) = 11.66, p < .001$, partial $\eta^2 = .16$; for reading, $F(1,61) = 21.72, p < .001$, partial $\eta^2 = .26$; for math, $F(1,61) = 20.66, p < .001$, partial $\eta^2 = .25$; for science, $F(1,61) = 23.54, p < .001$, partial $\eta^2 = .28$; and for social studies, $F(1, 61) = 18.19, p < .001$, partial $\eta^2 = .23$. Similar to the results for overall grades, there were no changes in academic
functioning in any of the subject areas nor were there any significant interactions by group membership. However, inspection of the plots (see Figures 4, 5, 6, 7, and 8) of grades across time did reveal some interesting outcomes. In language arts, reading, and science, participants demonstrated an increase in grades from the grading period immediately before and immediately after the program (between time three and four).

Figure 4. Average Language Arts grades for participant and control group students.

Figure 5. Average math grades for participant and control group students.
Figure 6. Average reading grades for participant and control group students.

Figure 7. Average science grades of participant and control group students.
Research Question Two: (a) Is there a relation between students’ level of success in the program and the change in school functioning? (b) Is there a relation between students’ level of success in the program and the change in academic performance?

Table 4 demonstrated no significant bivariate correlations between students’ level of success in the program and their change in academic performance, school functioning, absences, or days suspended. In addition, repeated measures MANOVAs were run using level of success as a covariate and its interaction with the changes in functioning were tested. Consistent with the bivariate correlations, there were no significant interactions of school functioning with level of success $F(1,50) = .346, p = .56$, partial $\eta^2 = .007$ or academic functioning with level of success $F(5,24) = 1.101, p = .386$, partial $\eta^2 = .187$. 

Figure 8. Average social studies grades of participant and control group students.
Research Question Three: (a) Are changes in school functioning and academic performance moderated by type of behavior infraction for which students entered the program? (b) Are relations between success in the program and school functioning/academic performance moderated by type of behavior infraction for which students entered the program?

All of the students that met criteria for inclusion in this analysis were referred for persistent misbehavior. None of the students referred for the program who enrolled after the start of the 2006-07 school year or exited before the completion of the 2007-08 school and remained in the program for at least 50 school days were referred due to a single serious discipline incident. State education code dictates the number of days a student may attend a disciplinary alternative education placement. Students assigned to the program for a single serious incident were not permitted to attend the program for the full 50 school days required for inclusion in this sample.

Research Question Four: (a) Are changes in school functioning and academic performance moderated by students’ grade level? (b) Are relations between success in the program and school functioning/academic performance moderated by students’ grade level?

Repeated measures multivariate analysis of variance, similar to those used in Question One, were run again using grade level as a covariate; and testing its interaction with changes in school functioning and academic performance (i.e., testing the interaction with time) indicated there was no significant two-way interaction of grade level with changes in academic functioning $F(20,166.78) = .738, p = .783$, partial $\eta^2 = \ldots$
.068 nor three-way interaction of grade level with changes in academic functioning and
group membership $F(20,166.78) = 1.271, p = .205$, partial $\eta^2 = .111$. However, there
was a significant two-way interaction of grade level with changes in school functioning
$F(5,95) = .4.76, p < .01$, partial $\eta^2 = .20$ but not a three-way interaction of grade level
with changes in school functioning and group membership $F(5,95) = 2.31, p = .05$, partial
$\eta^2 = .11$. See Figures nine and ten for plots of estimated marginal means for each
grade level for program participants and control group students, respectively. The
interaction shows that absence and suspensions rates for third and fifth graders did not
decline at the same rate as other grade levels.

![Graph showing school functioning before and after the program for different grade levels.]

**Figure 9.** Estimated marginal means of school functioning for each grade level before
and after the program for participants.
Repeated measures multivariate analysis of variance, similar to those used in question two, were run again using grade level as a covariate; and testing its interaction with changes in school functioning and academic performance (i.e., testing the interaction with time) indicated there was no significant two-way interaction of grade level with changes in school functioning $F(4,20) = 1.54, p = .23, \text{ partial } \eta^2 = .236$ nor three-way interaction of grade level with changes in school functioning and level of success $F(2,20) = 2.26, p = .13, \text{ partial } \eta^2 = .184$. There was not a significant two-way interaction of grade level with changes in academic functioning $F(20,24.16) = 1.42, p = .20, \text{ partial } \eta^2 = .475$. The test of a three-way interaction of grade level with academic functioning and level of success could not be run. However, as level of success was not significantly correlated with any of the measured outcome variables as shown on table four, and there was no significant relation in level of success and change in academic functioning. 

Figure 10. Estimated marginal means of school functioning for each grade level before and after the program for the control group.
performance as shown in question two, it is unlikely grade level is a significant moderator with success in the program and changes in academic functioning. See Figures nine and ten for plots of estimated marginal means for each grade level for school functioning of program participants and control group students, respectively. The interaction shows that absence and suspension rates for third and fifth graders did not decline at the same rate as other grade levels.
Summary and Conclusions

Alternative education discipline programs are one component of the continuum of discipline techniques used by many public school systems. These programs are intended to address the behavior of students who persist with misbehavior and engage in serious acts of mischief that cannot be managed in the regular public education setting. The program of focus here attempts to remediate these students’ behavior by implementing interventions that teach and reinforce appropriate behaviors to promote academic success. The primary difference between this program and other disciplinary alternative education placements is the presence of behavior interventions including a structured system of reinforcement, ongoing counseling sessions, social skills curriculum, and parenting skills classes. The main goal of the current study was to evaluate the outcomes of this program.

A total of 114 students participated in this study; 57 program participants and 57 control group students. Control group students were matched to the program
participants in the following areas: sex, grade level, ethnicity, and home school campus. Matching was used to control for the discrepancy in the characteristics of the program participants compared to those of the general population of the school district. These distribution differences are commonly observed in students referred for school discipline.

Success in school requires both behavioral and academic performance. Students who are disruptive of the learning environment have an increased risk for negative school outcomes (McEvoy & Welker, 2000). Consistent with this, comparison of participants in this program with control group students revealed that students who attended the program were indeed lower performing students. The primary goal of this program was to prevent recurrence of the behaviors that led to a referral to the program in the first place. As a consequence, students would be better able to participate in the public education system through improved academic performance. In fact, a significant negative correlation between changes in academic functioning and changes in school functioning and suspensions showed that students experiencing fewer in- and out-of-school suspensions after the program, and missing less school due to absences, indeed had higher report card grades. When a student misses less school, they have greater opportunities for instruction and practicing academic skills reflected in improved report card grades.

Unfortunately, student grade level was negatively correlated with change in school functioning and change in suspensions, showing that students in higher grade levels had less improvement in school functioning and suspensions. All of the
participants in this analysis were referred to the program for persistent misbehavior; therefore, it is possible that older students had engaged in these behaviors for longer than younger students and therefore, demonstrated less improvement in behaviors resulting in in- and out-of-school suspensions. As demonstrated previously (Lahey & Loeber, 1994), the longer a behavior is present, the more ingrained it becomes, making change more challenging.

Discussion of Results

Research question one: (a) Do participants in the disciplinary alternative education program demonstrate improved school functioning after participation in the program? (b) Do participants in the disciplinary alternative education program demonstrate improved academic performance after participation in the program?

Participants in the program demonstrated significant improvement in school functioning after participation in the program and this change was not demonstrated within the control group. Interestingly, further analyses demonstrated the significant change was restricted to days of school missed due to in-school and out-of-school suspension and there was no significant change in days missed due to absences. This implies participation in the program had a positive impact on student behavior resulting in decreased disciplinary actions. However, there continued to be a higher rate of suspension among program participants compared to the control group students after the program, suggesting that there are negative factors contributing to school functioning that were not addressed effectively during program participation. In general, the program replaced inappropriate school behaviors with appropriate ones,
however, inappropriate behaviors continued to occur. Perhaps there was poor acquisition of the behaviors presented or a poor implementation of the social skills. This relates to the debate surrounding the etiology of disruptive behavior and social competence: whether the disruptive behavior was due to a lack of social skills or a difference in social information-processing. Additionally, differences in the home school environment could allow these behaviors to return or continue, such as the sudden decrease in structure during the school day, decreased supervision due to the class size difference, or a decrease in support services, such as counseling or individual behavior coaching in difficult situations. There may be factors external to the school environment, such as familial or community standards, that limited behavioral change.

Program participants did not demonstrate significant improvements in academic performance after participation in the program and participants continued to show lower academic performance than control group students. The program did not effectively address student academics but several explanations are possible. First, students who participated in the program continued to be suspended at higher rates than control students, just not at as high a rate as prior to the program; therefore, they continued to miss more school than their peers. Additionally, although report card grades are based on performance on tasks presented during a specific time period, the academic skills required to perform those tasks are acquired over longer periods of time. Participant students may have “gaps” in their learning due to frequent interruption in instruction due to discipline problems. Finally, the study skills required to do well in school were not a focus of the program. Instead, externalizing problems, such
as complying with rules and respectful behavior, which lead to fewer discipline referrals, were the focus of intervention. As a result the students showed improved skills in following school rules, but there was no change in their ability to study, organize their work and thinking, manage time, and other study skills necessary for academic success.

**Research question two:** (a) Is there a relation between students’ level of success in the program and the change in school functioning? (b) Is there a relation between students’ level of success in the program and the change in academic performance?

Interestingly, changes in student outcomes were not related to how well a student performed in the program (i.e., level of success in the program). Students who demonstrated appropriate behaviors in the program in order to pass days and progress through the levels showed no greater improvement in outcomes than students who did not comply with program expectations. This may mean that enrolling in a program focusing on correcting behavior exposed students to the correct skills that they used upon returning to their home campus, even if they did not demonstrate the skills during program enrollment. Perhaps the criteria for a passing day should be re-examined to determine whether different criterion levels may better discriminate between students who improved and those who did not improve.

**Research question four:** (a) Are changes in school functioning and academic performance moderated by students’ grade level? (b) Are relations between success in the program and school functioning or academic performance moderated by students’ grade level?
There was not a significant interaction of grade level with changes in academic functioning or a three-way interaction with changes in academic functioning and group membership, indicating that students at different grade levels did not have differing academic outcomes. However, there was a significant interaction of grade level with changes in school functioning but not a three-way interaction of grade level with school functioning and group membership. The interaction showed that school functioning for third and fifth graders did not decline at the same rate as other grade levels (See Figures 9 and 10).

Further, correlations between success in the program and measured outcome variables were not significant. When student grade level was included, there was very little variability in program success at individual grade levels. The inclusion of grade level as a moderator did not lead to a significant interaction with success in the program and school functioning or academic performance. This leads to the conclusion that changes in the measured outcomes at each grade level are not significantly related to level of success.

**Limitations of the Current Study**

The program under consideration is an active, changing program in use by a school district with widely diverse students and, therefore, the program procedures and data collection are part of real-world, imperfect situations. Each of the students included in this analysis have individual lives and circumstances that contributed to their responses to school and the program. Additionally, the staff members of the program and school as a whole have individual responses to the program procedures and the
students that may impact the measured outcomes. This is the reality of evaluating programs and research in the field of school psychology. As a result, individual fluctuations in data may reflect external events not tracked or measured here.

One component of the school functioning variable is a measurement of days of school missed for disciplinary reasons (in-school and out-of-school suspensions). The behaviors contributing to these days vary widely and not all discipline referrals are equal. For example, a student may have one or more days of in-school suspension for disrespecting authority and refusing to comply with directions while another student may have one or more days of out-of-school suspension for an act of physical aggression. As they result in the same number of days, they were counted as the same. Additionally, a student may engage in misbehavior resulting in three discipline referrals resulting in three, one-day assignments to a discipline placement while another student may have one discipline referral that results in one, three-day assignment to a discipline placement. These are similar because the outcome is the same, however, the behaviors may be representative of different problems. It would be helpful to know if there was a pattern in student referrals for type of infraction (e.g., verbal or physical aggression, disrespectful actions, work refusal) related to level of success in the program, grade level, or academic functioning.

There is a school district-wide code of conduct to which every student must adhere and there is a continuum of recommended consequences for each infraction. However, there may be variability in the use of formal discipline referrals and application of consequences at different campuses or between administrators at the
same campus. The use of a control group matched by sex, grade, ethnicity, and home
campus attempted to balance the possibility of these variations. Some of the campuses
in the school district began a positive behavior support program during these two school
years that may have influenced student behavior, overall discipline referrals, or the
consequences assigned. Again, the use of a matched control group attempted to
balance for any differences that may have occurred.

The differences in school functioning also may be accounted for by differential
treatment between program participants and the general school population by school
staff. The students referred to this program often develop a reputation of “a bad kid”
leading school staff to consciously or unconsciously administer discipline differently
from the students with the reputation as “a good kid.” This may lead to differences in
leniency or strictness for similar actions between different students. Additionally, upon
returning from the program, participant students may face increased scrutiny of their
behavior resulting in differences in discipline referrals or assigned consequences from
control group students.

Research question three could not be addressed as there were no students
referred to the program for a single serious infraction during the named time period
that met inclusion criteria. Specifically, several students were excluded because they
were assigned to the program for less than the needed 50 school days in order to
proceed through the level system and reach graduate status. This occurred because the
state law regarding discipline placements dictates the number of days for single serious
incidents and persistent misbehavior. As a result, an entire group of students were
excluded from the analysis, thereby limiting conclusions to just those students with a pattern of persistent misbehavior.

Implications for Future Research and for Alternative Education Programs

As previously discussed, none of the students referred to the program for a single serious incident were included in the analysis. In the future, the examination of the potential differences between students referred for a single, serious incident and students referred for persistent misbehavior is important. They may have different levels of success or different outcomes. This information may lead to helpful insights regarding the structure of the program and help establish criteria by which program staff may better predict which students may benefit and which students may require adjustments to the intervention.

This analysis examined outcomes during the first three marking periods following the program intervention. This is equivalent to half of a school year. In the future, it may be helpful to examine outcomes over a longer time after the intervention. For example, determining whether students continue with improved school functioning or if students eventually “catch up” in academic functioning would help guide future decisions with the program. Report card grades are based on academic performance during the specified time period; however, the academic skills required for assigned tasks may have gradually built over time and therefore, improvement in academic skills may take more than three report card grading periods.

Future research should focus on identifying the presence of various risk and protective factors in these students. Protective factors related to problem-solving skills,
friendships, social interactions, and others listed by Vance, Fernandez, and Biber (1998) and Deater-Deckard (2001) can be compared to outcome variables. This information would be used to make modifications to the program with regard to the social skills guidance curriculum or counseling sessions.

Up to this point, consumer perceptions of this intervention have never been formally assessed. A survey of student, parent, and school staff regarding their perception of the effectiveness of the program may provide insight into unexpected outcomes or consumer biases and expectations. The program must address or overcome these perceptions when a student enrolls. Additionally, perceptions of the use and effectiveness of the program may differ between students, parents, and staff indicating a need for differential educational outreach.

Participants in the program included a greater proportion of students from Title I schools which is determined by the incidence of students from low socioeconomic status households. In the future, examination of the relationship between an individual student’s socioeconomic status and outcomes in the program may provide insight into whether the program addresses all of a student and their family’s needs, not just behavior in school and how well.

There was a disparity in the sex, ethnicity, and home school Title I status between program participants and the general student population. This has been observed in previous research examining the incidence of discipline referrals and assigned consequences for males, low socioeconomic status students, and historically ethnic minorities. The implication here suggests the social climate of an individual
school campus, the surrounding community, and even the greater cultural system may have a weakness in addressing the needs of our male, minority, or poor students. Clearly, because of the high incidence of this disparity across the country, there is not something different about this program or the district in which it is used from other schools; however, it is representative of a greater problem that public education and our society as a whole face. If all of our students are to be successful, the education system needs to address this challenge. Currently, this school district has implemented positive-behavior support programming to address student academic and behavior problems on a multi-tiered intervention system. It would be interesting to examine whether students who receive positive behavior support interventions are able to avoid further discipline difficulties or to examine whether positive behavior support teams are formally attempting to address the disparity in discipline.

Several of the outcomes assessed in this study did not demonstrate the statistical significance expected. Possibly, changes in these variables occur over longer time than was assessed here and are related to many things beyond the scope of this study. To determine whether the program is having the direct impact on participants as intended, it may be more effective to directly assess students for their ability to perform the specific skills addressed in the program, before and after participation. If these skills are related to academic and behavioral outcomes, then the changes in academics and behavior will gradually build over time.

**Recommendations to Program Administrators**
This program dedicates a great deal of resources to a limited number of students. It would appear from this analysis that overall, participants miss fewer days of instruction after participating. However, they continue to be assigned to in-school or out-of-school suspension at greater rates than their peers. Overall, these students have lower academic report card grades and participation in the program does not lead to a statistically significant change in grades. Success in the program was not significantly related to changes in student behavior suggesting a decrease in the importance placed on “graduation” from the program as currently defined.

The program as described here has several components addressing a variety of needs, but it should include more multidisciplinary resources that may be external to the school system. Proactive efforts to include psychiatrists, psychologists, nurses, social workers, community leaders, or other professionals who can address the varying needs of each student and integrating these services with the existing program structure would promote a more comprehensive approach. Comprehensive programs are most likely to have the greatest positive impact on a student’s success in school. The participants in this program are likely among the students in greatest need of the largest number of supports in the school district. The cooperative resources dedicated to these students may positively influence more than just these individual students. Their family and home campus as a whole would benefit through that student’s success because of the decreased disruption to other students and improvements in each level of the neighborhood.
The social learning philosophy is a core belief of the program and dictates student behavior is learned and can be changed. It relies on the ability to re-teach or replace behaviors with new, more adaptive behaviors as the basic foundation of the program. Without this philosophy, the children referred to this program may not have hope of changing their established negative pattern and take advantage of the opportunities afforded by an education. The drawback of this circumstance is that participants have other students with ongoing, disruptive behaviors as peer models while enrolled. It is possible that participating in the program allows for social learning of new or more extreme behavior problems. The program attempts to restrict this negative outcome by maintaining strict order and by allowing participants to gradually “earn time” with the general school population in which students are exposed to non-referred peer behaviors and given the opportunity to practice newly acquired skills.

Disruptive school behavior is theorized as resulting from one of two sources. It can be a deficit in social skills or a difference in social information-processing. The program addresses the first category through instruction, modeling, and practice of a variety of social skills included in the curriculum. Counseling sessions potentially can address differences in social information-processing; however, the goals and methods of counseling sessions are determined on an individual basis by collaboration between the counselor, parents, and program staff based on their perception of each student’s need. Although the needs of each student should guide the ultimate goals and methods applied in counseling, it is important to ensure each child receives training to assist development of social information processing at some point in their programming.
Students exiting this program return to their home campus with recommendations from program staff. These recommendations should be accompanied by direct assistance with implementation. Undoubtedly, program staff members learn a great deal about each student during their participation and may have found techniques and methods that are particularly useful or to be avoided with each student. Assistance with how to fit these techniques and methods into a student’s home campus system will increase the likelihood recommendations will be attempted and used with integrity.
References


*Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision.*


Hersen (Eds.), *Handbook of conceptualization and treatment of child psychopathology* (pp.57-76). Amsterdam: Elsevier Science.


Individuals with Disabilities Education Improvement Act of 2004, Pub. L. No. 108-446


Justice and Delinquency Prevention.


Robinson, K.E. & Rapport, L.J. (2002). Outcomes of a school-based mental health


# Appendix

Table A1. Program Level System

<table>
<thead>
<tr>
<th>Level</th>
<th>Criteria</th>
<th>Description</th>
<th>Earned Time Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level I</td>
<td>• minimum of 10 days</td>
<td>• desk faces back wall</td>
<td>• activity assigned by teacher</td>
</tr>
<tr>
<td></td>
<td>• 80% of points must be earned each day to progress</td>
<td>• supervised bathroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• lunch in class-chosen by teacher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• checks earned every 20 minutes</td>
<td></td>
</tr>
<tr>
<td>Level II</td>
<td>• minimum of 10 days</td>
<td>• desk faces back wall</td>
<td>• choice of all Level I and Level II activities</td>
</tr>
<tr>
<td></td>
<td>• 85% of points must be earned to progress</td>
<td>• supervised bathroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• lunch in class-chosen by student</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• checks earned every 20 minutes</td>
<td></td>
</tr>
<tr>
<td>Level III</td>
<td>• minimum of 10 days</td>
<td>• desk faces side wall</td>
<td>• choice of all Level I, II, and III activities</td>
</tr>
<tr>
<td></td>
<td>• 90% of points must be earned to progress</td>
<td>• supervised bathroom</td>
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<tr>
<td></td>
<td></td>
<td>• supervised walk to cafeteria to select food, eat in room</td>
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<tr>
<td></td>
<td></td>
<td>• checks earned after each hour</td>
<td></td>
</tr>
<tr>
<td>Level IV</td>
<td>• minimum of 10 days</td>
<td>• desk faces open area</td>
<td>• choice of all Level I, II, III, and IV activities</td>
</tr>
<tr>
<td></td>
<td>• 95% of points must be earned to progress</td>
<td>• lunch in the cafeteria with a peer from mainstreamed class</td>
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<tr>
<td></td>
<td></td>
<td>• mainstreamed for one hour</td>
<td>• two students on Level IV or V may work together</td>
</tr>
<tr>
<td>Level V</td>
<td>Level VI</td>
<td></td>
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</tbody>
</table>
| - minimum of 10 days  
- 95% of points must be earned to progress  
- checks earned at midday and end of day  
- checks earned after each hour  
- desk faces open area  
- mainstreamed for half of the day, including lunch  | - Minimum of 20 days  
- 95% of points must be earned to progress  
- mainstreamed for a full day  
- check in with program teacher at the start of the day  
- check out with program teacher at the end of the day  | - choice of all Level I, II, III, IV, and V activities  
- Two students on Level IV or V may work together  |
Table A2. Program classroom rules

- Cooperate with others
  - Share materials
  - Participate Appropriately

- Work satisfactorily on task
  - Remain in appropriate location
  - Complete assignments in class
  - Work on task silently (no noises, singing, tapping, stomping, etc.)
  - Move from one task to another appropriately
  - Pay attention and listen to others while they are speaking
  - Bring appropriate materials to class

- Maintain self-control
  - Follow directions
  - Accept responsibility for own behavior (admitting, tattling, etc.)
  - Keep hands, feet, etc. to yourself
  - Accept “no” appropriately
  - Disagree appropriately

- Speak politely to others and respect others
  - Greet appropriately
  - Be courteous to others
  - Make requests appropriately
  - Get teacher’s attention appropriately
Table A3. Point sheet for tracking progress throughout each day in the program.

___________ is on Level ___, day ___ and needs _____ points to pass.      Date:

<table>
<thead>
<tr>
<th>Observed Behaviors</th>
<th>8:00-9:00</th>
<th>9:00-10:00</th>
<th>10:00-11:00</th>
<th>11:00-12:00</th>
<th>12:00-1:00</th>
<th>1:00-2:00</th>
<th>2:00-3:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cooperate with others</td>
<td></td>
<td></td>
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<tr>
<td>Share materials</td>
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<tr>
<td>Participate appropriately</td>
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<tr>
<td>Work on task</td>
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<tr>
<td>Remain in appropriate location</td>
<td></td>
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<tr>
<td>Complete assignments in class</td>
<td></td>
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<td></td>
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<tr>
<td>Work on task silently</td>
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<tr>
<td>Move from one task to another</td>
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<tr>
<td>Pay attention and listen to speaker</td>
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<tr>
<td>Bring appropriate materials to class</td>
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<tr>
<td>Maintain self-control</td>
<td></td>
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<td></td>
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<tr>
<td>Follow directions</td>
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<tr>
<td>Accept responsibility for own behavior-admitting, tattling</td>
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<tr>
<td>Keep hands, feet, etc. to self</td>
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<tr>
<td>Accept no appropriately</td>
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<tr>
<td>Accept correction appropriately</td>
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<td>Disagree appropriately</td>
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<td>Speak politely and respect others</td>
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<tr>
<td>Greet appropriately</td>
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<tr>
<td>Be courteous</td>
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<tr>
<td>Make requests appropriately</td>
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<tr>
<td>Get teacher’s attention appropriately</td>
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<td>Personal behaviors</td>
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<td>1.</td>
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<tr>
<td>Teacher’s Signature</td>
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</tbody>
</table>

Additional Points from evening meeting =    Today’s Total = Max = 105

Required Percentages: Level I 80%/85 pts.; Level II 85%/89 pts.; Level III 90%/95 pts.; Level IV-VI 95%/100 pts.

Record Points: Levels I & II every 20 minutes, Levels III & IV each hour, Level V at mid-day and day’s end, Level VI at day’s end only.

Time Out Earned: Levels I & II if 3 initials are earned in 1 hr., in 1 rule area, Levels III-VI if 3 initials are earned in 1 hr.

Mainstreamed Students: Any student on Levels IV, V, or VI that earns three initials in any single hour will need to return to program class at that point and serve his/her time out.

Dropping a Level: Any student on Levels IV, V, or VI who does not pass two days in a row drops to the first day of the previous level.