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# A Quantitative Study of the Effectiveness of Positive Behavior Support in Secondary Schools

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# A QUANTITATIVE STUDY OF THE EFFECTIVENESS OF POSITIVE BEHAVIOR SUPPORT IN SECONDARY SCHOOLS

by

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ABSTRACT

A QUANTITATIVE STUDY OF THE EFFECTIVENESS OF POSITIVE BEHAVIOR SUPPORT IN SECONDARY SCHOOLS

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This study was conducted to evaluate the long-term effectiveness of a second tier intervention on at risk students' behaviors and academic success. The study included 113 middle school and junior high students identified as being at risk for emotional and behavioral disorders using the Systematic Screening for Behavior Disorders (SSBD). The participants were assigned to a control group (no treatment), one, two, or three semesters of the intervention. The intervention integrated components of social skills instruction, self-management techniques, and social and emotional awareness. Students' behaviors and academic success were measured using school data (i.e. GPA, Office Discipline Referrals, attendance, and tardies) and Achenbach Teacher Rating Forms (TRF), in pretest-posttest intervention designs over a five-year period. This research used archival data funded in part by an OSEP Federal Grant (H324c030124). Primary investigator was K. Richard Young and co-primary investigator was Ellie L. Young. Results

indicated that students receiving the intervention did not differ significantly from the control group in all areas measured.

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# INTRODUCTION

Approximately 10%-15% of youth can be considered to be at risk for developing significant emotional, behavioral, and/or academic problems (Walker, Cheney, Stage, & Blum, 2005). Children with behavioral disorders are less likely to graduate from high school and have been found to have lower levels of post secondary school attendance (Nelson, Benner, Lane, & Smith, 2004). According to Lane, Pierson, and Glaeser (2006) students with disabilities such as ED (emotional disturbance) experience higher rates of unemployment after graduation than students without disabilities, (Bullis & Cheney, 1999; Carter & Webby, 2003; Zigmond, 2006), lower rates of appropriate interactions within the community (Armstrong, Dedrick, & Greenbaum, 2003), and elevated rates of incarceration (U. S. Department of Human Services, 1999).

Only one percent of the school-age population is receiving services as a student with an emotional disturbance (ED) even though a much larger portion of students is at risk for ED (Lane, 2007; Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005; Walker, Ramsey, & Gresham, 2004). This disproportionality implies that a notable number of students probably need services, but they are not receiving appropriate interventions. This apparent disconnect between needs and services may be addressed by identifying students who may be at risk for ED and providing services along a continuum of needs (President's Commission on Excellence in Special Education, 2002; Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson, et al., 1999). According to Utah's current Special Education Rules (Utah State Board of Education, 2008), ED classification describes students who exhibit severe emotional and behavioral concerns, however, the more general, frequently used term Emotional and Behavioral Disorders (EBD) will be used in the remainder of this paper.

Students who have emotional and behavioral problems are at risk for continuing ineffective, troublesome behaviors in adulthood when adequate interventions are not implemented. School-aged children who are reported showing high rates of antisocial behavior are more likely to exhibit the same behaviors later in life than children who initially show lower rates of antisocial behavior (Offord & Bennett, 1994). Youth who demonstrate emotional and behavioral problems have higher rates of academic failure, school dropout, substance abuse, and court involvement (Hoff & DuPaul, 1998; Kauffman, 2001; Lane, Carter, Pierson, & Glaeser, 2006; U.S. Department of Education, 2001; Walker, Colvin & Ramsey, 1995).

Reducing inappropriate behaviors and increasing appropriate behaviors becomes a priority in order to provide the most nurturing, productive environment for all students. Unfortunately, when compared to their more behaviorally appropriate peers, students with behavioral problems experience considerably fewer instructional interactions (Scott, Nelson, Liaupsin, Jolivette, & Riney, 2002). Managing these behaviors continues to be one of the most difficult problems for both teachers and administrators (Algozzine & Kay, 2002; Furlong, Morrison, & Dear, 1994). Educators tend to face many challenges in working effectively with these students. Often behaviors are managed by removing the student from the school setting (Algozzine & Kay), which makes it difficult for students to receive the instruction they need.

In addition to ensuring that youth with emotional problems receive appropriate instruction, educators also face the challenge of the progressive nature of the problem behaviors of youth with ED (Lane, 2002). Developing and implementing interventions in a timely manner can address these ineffective behaviors and long-term outcomes. By combining screening efforts and Positive Behavior Support (PBS) strategies (i.e., tiered and early intervention), schools can make strides in preventing problems behaviors by supporting students who are not included

under the special education umbrella (Lane, 2007). PBS focuses on school climate as a whole and teaches and reinforces positive behaviors before problem behaviors arise by altering the environment in order to avoid a potential problem (Carr, Horner, Turnbull, Marquis, McLaughlin, McAtee, et al., 1999; Safran & Oswald, 2003). This is often done by modeling behaviors, providing opportunities for students to demonstrate these behaviors and reinforcing appropriate behaviors. By using a three-tiered intervention model, PBS strives to meet the multiple needs of students at risk for behavior problems (Lane, 2007).

PBS is not a recent intervention model, due to the fact that the theories driving PBS have been used for some time. Behavioral science lies at the core of PBS integration and includes practices of functional behavioral assessments (FBA) (Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson, et al., 1999). FBA requires the identification of events leading up to the behavior and factors that maintain and predict the behavior (Carr, 1994; Sugai et al., 1999). Lane et al. (2006) noted that students with behavior problems demonstrate a deficit in the areas of social and emotional skills. Knowing that these skill deficits may lead to an ongoing behavior problem, PBS interventions can be used to address these deficits through early intervention.

One means of providing early intervention is the direct teaching of social skills (Spence, 2003). Social skills instruction focuses on teaching appropriate ways to think and respond under a variety of circumstances. This is important for students at risk for emotional or behavioral problems because there is often a lack of appropriate social skills, including self-control, which often leads to disciplinary consequences because of impulsive or aggressive social behavior (Gresham, 1982; Spence). Social skills instruction can become more effective when it includes a component that addresses emotional awareness, which can help bridge the gaps between academics and behaviors (Merrell, Juskelis, Tran, & Buchanan, 2008).

A second preventative strategy, emotional awareness, focuses on increasing emotional awareness while including cognitive techniques to promote better regulation of emotions. Social and emotional learning becomes an important component in early intervention because it enhances students' relationships and reduces the drop-out rate (Greenberg, Weissberg, O'Brien, Zins, Fredericks, & Resnik, 2003; Hamre & Pianta, 2005; Mathur, 2007; Ragozzino, Resnik, O'Brien, & Weissberg, 2003). Research completed with junior high school students demonstrated that SEL curricula increased socio-emotional knowledge and decreased negative social-emotional symptoms (Merrell et al., 2008).

Self-monitoring, an additional component of early intervention, is a successful intervention for students with behavior disorders (Young, West, Li, & Peterson, 1999). Implementation of this intervention removes some of the behavior management responsibility from the teacher to the student. Examples of the targeted behavior are explained to the student, helping him or her to identify the occurrence of the behavior. The student is required to first recognize the occurrence of the behavior then keep data on the frequency, duration, and/or intensity of the behavior. Self-monitoring increases self-awareness (Prater & Hogan, 1992) and provides immediate feedback on what the student should be doing compared to what they are actually doing (Reid, Trout, & Schartz, 2005). An additional benefit of self-monitoring is that it can be used across multiple settings and has an increased probability of maintaining the behavior in all settings (Prater & Hogan, 1992).

Social skill instruction, self-monitoring, and emotional awareness are examples of preventative strategies to address emotional and behavioral problems in schools. However, there are some challenges in understanding the long-term outcomes of these efforts. The long-term effectiveness of preventative measures has been difficult to analyze due to the inability to

determine the avoidance of something (e.g., a disorder) that does not yet exist (Kauffman, 1999). Although it is not certain that at-risk students would later demonstrate more severe behaviors, prevention strategies can still be considered effective by increasing positive behaviors enhanced by the program (Algozzine & Kay, 2002; Kauffman).

The current research study will examine the effectiveness of the three previously mentioned components of PBS in the secondary schools. Specifically, the study will consider how a small group intervention which incorporated these interventions influenced academic and behavioral outcomes for participants who were identified as at risk for EBD. Focus will be placed on the changes in teachers' perceptions of students' behaviors that have completed courses focusing on the elements of social skills, emotional awareness, and self-monitoring.

# LITERATURE REVIEW

Emotional Disturbance (ED) is one of the thirteen categories of education disabilities supported by the Individuals with Disabilities Education Act (IDEA). The group of youth with ED consists of approximately 475,000 students, with about 65% being twelve years or older (Cullinan & Saborne, 2004). ED is a broad a category or classification of special education which manifests itself in many forms. IDEA's definition of ED "encompasses diverse behavior, emotion, and cognition problems" (Cullinan & Saborne, 2004, p. 157).

The following rules for identifying an emotional disturbance are in compliance with the requirements outlined in the Individuals with Disabilities Education Act (IDEA) 2004 Regulations as listed by the Utah State Office of Education (2003).

> A condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a student's educational performance:
>
> (1) An inability to learn that cannot be explained by intellectual, sensory, or health factors.
> (2) An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
> (3) Inappropriate types of behavior or feelings under normal circumstances.
> (4) A general pervasive mood of unhappiness or depression.
> (5) A tendency to develop physical symptoms or fears associated with personal or school problems.
>
> Emotional disturbance includes schizophrenia. The term does not apply to students who are socially maladjusted, unless it is determined that they have an emotional disturbance. (p. 36)

Emotional Disturbance is a term used specifically for Special Education classification (Utah State Board of Education, 2008); however, the term EBD is more frequently used and also describes students with severe emotional and behavioral problems.

*Characteristics of Youth with Emotional and Behavior Disorders*

Students with EBD demonstrate behaviors that impair their educational experience. The behavioral challenges of students with EBD generally remain stable or worsen over time (Greenbaum, Dedrick, Friedman, Kutash, Brown, Lardierh, et al., 1996; Lane, Carter, Peirson, & Glaeser, 2006; Mattison, Hooper, & Glassberg, 2002; Nelson, Benner, & Smith, 2004). Students with EBD spend less time in school than non-EBD students (Algozine & Kay, 2002), with more than half of students with EBD between the ages of 12-17 spending more than 60% of their day outside the general education classes (Cullinan & Sabornie, 2004). Students with EBD also tend to have the highest drop-out rate (51%) of students in any other special education category (Cullinan & Saborne, 2004; U.S. Department of Education Office of Special Education Programs, 2001).

In addition to a high drop-out rate, students with EBD are also at an increased likelihood that they will be rejected by peers. This may be due to findings which indicate that boys with EBD demonstrate less sympathy, less frequent contact with peers, and lower quality relationships (Cullinan & Saborne, 2004). One key component in establishing healthy social and emotional well-being is the ability to obtain and maintain friendships. Hill and Coufal (2005) noted that friendships foster learning opportunities for children to "use, refine, and enhance skills that allow them to interact, negotiate, resolve conflicts, exchange ideas, collaborate, and solve problems" (p. 34). Without these skills, children are more likely to be rejected by their peers and experience more school difficulty. Adolescents with EBD are more likely to be rejected and less likely to be accepted when compared to students without disabilities (Cullinan & Saborne, 2004; Saborne, Kauffman, & Cullinan, 1990).

In addition to a lower rate of social competence, EBD students exhibited higher levels of behavior problems. Cullinan and Saborne (2004) found that middle school students with EBD tend to receive more office discipline referrals for violence, defiance, fighting, etc. than their peers without disabilities. These behavior problems may extend beyond the classroom, into work and community environments (Bullis, Nishioka-Evans, Fredericks, & Davis, 1993; Bullis, Bull, Johnson, & Johnson, 1994).

*Services for At-risk Youth*

Historically, educational programs have not been effective for students with emotional and behavioral disabilities (Eber & Nelson, 1997). Kauffman (2001) has estimated that 2% of students at any given time are considered to have an emotional/behavioral disorder (EBD). Of this 2%, less than 1% are provided with special education services (Eber and Nelson,1997; U.S. department of Education, 1994). Approximately 6-10% of unclassified students who are enrolled in general education curriculum demonstrate behavior needs as severe and those students classified as EBD yet receive fewer services (Landrum & Tankersley, 1999). This indicates that a large number of children are limited in their access to interventions, supports, and service providers.

Behavior management has become a key element in providing students with the most appropriate education. Compared to their non-identified peers, students with behavioral problems engage in fewer instructional interactions with their teachers (Scott, Nelson, Liaupsin, Jolivette, & Riney, 2002). School systems tend to face many challenges in working effectively with these students. Often behaviors are managed by removing the student from the classroom, resulting in placement in self-contained settings without access to the general curriculum (Mathur, 2007).

Unfortunately, behavior problems are usually addressed in a more reactive manner as opposed to a preventative method. Bowman and Kauffman (2001) conducted a retrospective analysis of school-age students who were classified EBD in their middle school years. It was found that these students were identified as having behavior problems during elementary school years but the issues were not addressed with appropriate interventions until the misconduct became more severe (Forness et al., 2000), usually resulting in a change of placement. This delay in intervening can become problematic and require more intensive and intrusive interventions (Bergan & Kratochwill, 1990; Foorman, Francis, Shaywitz, Shaywitz, & Fletcher, 1997; Lane, 2002; O'Shaughnessy et al., 2002).

*Early Intervention for At-risk Youth*

The key to improving outcomes for EBD children and youth is early identification and intervention (President's Commission on Excellence in Special Education, 2002; U.S. Department of Health and Human Services, 1999), although research shows that services are typically initiated approximately two years after the onset of problems (Wagner, Kutash, Duchnowski, & Friedman, 2005, Wagner, Kutash, Duchnowski, Epstein, & Sumi, 2005). Earlier intervening tends to be more effective than remediation, given that emotional/behavioral problems evolve over time (Lane, Gresham, & O'Shaughnessy, 2002). Delays in referrals for children with behavior concerns are common, which allow the behavioral problems to become more severe (Forness, Serna, Nielsen, Lambros, Hale, & Kavale, (2000). The scope and severity of behavior problems increases the longer children go without adequate interventions (O'Shaughnessy, Lane, Gresham, & Beebe-Frankenberger, 2003). Interventions become more successful when the discrepancy between current levels of performance and expected performance is most narrow (Bergan & Kratochwill, 1990; Foorman, Francis et al., 1997) and

prior to the integration of maladaptive behaviors into a child's behavioral repertoire (Kazdin, 1987; Walker et al., 1995).

A study by Forness et al. (2000) reports that the Albuquerque Youth Developmental Incorporated Head Start Programs serves as an example of promising responses to early intervention. Students were selcted to participate in Head Start's self-determination curriculum. In the program, students were taught problem-solving skills through story telling and role play. Parents were included and were taught how to reinforce their student's use of the newly learned skills. Pre- and post-data were gathered on the students' behavior and indicated that the scores of the students who received the intervention improved over time, while the control group's scores worsened.

*Positive Behavior Support (PBS) Interventions*

Identifying effective and efficient methods for meeting the needs of students with behavioral difficulties has become a dominant need due to the fact that many students with EBD (2-20%) will not receive special education services. In order to address the needs of students at risk for behavioral problems, schools are being enlisted as a source for change. The three-tiered model of positive behavior support (PBS) focuses on teaching appropriate skills and behaviors to all students and proving a place to practice and receive reinforcement and positive feedback (Lane, 2007; Walker, Cheney, Stage, & Blum, 2005). PBS models are driven by data that represents the response to intervention rate. These programs contain proactive approaches focusing on prevention at the universal level and reactive components focusing on remediation at the selective and individual levels (Lane et al., 2007)

Prevention systems can be divided in to three levels, which are universal, selective, and targeted (Lane et al., 2002). Based on writings from Algozzine (2002), the aim of universal

interventions is to target the large group of students (80%-90%) who exhibit minor behavior problems and keep more serious problems from unfolding. It includes positive reinforcement systems and social skills curriculum. Selective interventions slow down the potential or emerging behavior or emotional problems by increasing adult support and more intensive social skills training. Selective interventions or tier two interventions are generally implemented within the classroom and small group settings. Targeted interventions (also known as tier three interventions) focus on serious problems in efforts to keep them from escalating and are implemented on an individual level with intensive behavior plans (see Figure 1).

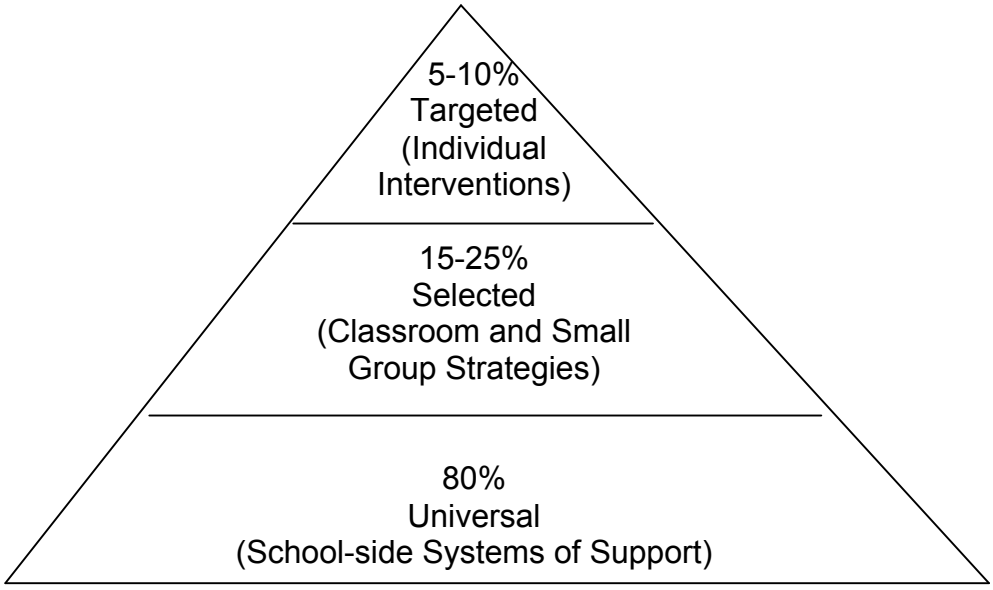


Figure 1

*Three-tiered Model of PBS*

Research efforts geared toward the efficacy of PBS have been challenging. Prevention research is generally conducted using archival data and lacks control groups. PBS interventions

at the selective and individual levels are often evaluated using pre and post intervention data (Kauffman, 1999). Luiselli (2005) reported that longitudinal primary and secondary prevention models are the logical interventions to influence positive school climate and youth behavior.

Prevention strategies become most effective when screening measures are used to identify at-risk students, and then followed with PBS models and tiered intervention (Lewis & Sugai, 1999; Scott et al., 2002). Early screening of deficits associated with later behavior problems becomes a focus of an effective PBS model (Severson et al., 2007). One of the common skills deficits that has been a focus of the PBS model is social skills, as social skill deficits have shown to be a predictor of behavior disorders. Interventions to improve these skills have often been a main component of PBS prevention efforts (Spence, 2003).

*Components of a Selective Intervention*

Selective interventions increase support and more intensive social skills training after a universal intervention has failed. Selective interventions are generally implemented within the classroom and small group settings. The intervention analyzed in this study includes components of direct instruction of social skills, self-monitoring, and emotional awareness curricula provided in the classroom.

*Direct instruction of social skills*. With inconsistent ideas among professionals about social skills, defining this concept can be challenging. Broadly defined, social skills or social competence is the ability to integrate behavioral, emotional, and cognitive skills to adapt to situations and obtain successful outcomes from interactions with others (Biermen & Welsh, 2000; Spence 2003; Spence & Donovan, 1998). Social skills instruction aims to increase the likelihood of reciprocal positive peer or authority figure interactions by teaching social and emotional skills, promoting resiliency, and increasing coping skills. The curriculum focuses on

educating children and youth about appropriate ways to think about and respond during uncomfortable or trying situations. Social skills instruction also fosters an increased self-awareness related to emotions and feelings and how those feelings can affect decision-making (Elksnin & Elksnin, 2004; Salovey & Mayer, 1990).

Increasing acceptable, positive behaviors among youth with or at-risk for EBD has become increasingly important when developing effective interventions. Social skill deficits have now been shown to be related to behavioral and emotional problems, and as a result, social skill lessons have become a key component to preventative measures (Spence, 2003). Within the school environment, students with EBD show limited social skills that place a demand on teachers' attention, lead to dysfunctional peer and adult relationships, and these deficits interfere with the instruction of all students in the classroom (Lane, 2007). The focus of social skills training is to increase the students' ability to demonstrate social behaviors that are important to achieving educational success (Spence).

The direct instruction of social skills is a key factor in the creating positive outcomes. In contrast the "character education" movement teaches the idea or the purpose behind a behavior in areas such as honesty, dedication, respect, etc. Character education programs usually focus on necessary topics for promoting social skills, yet usually fails to teach the behaviors associated with these themes. In order to have a successful program, these constructs "must be introduced into a classroom in developmentally appropriate ways . . .and the *behaviors* underlying these constructs (i.e., honest behavior; cooperative behavior; empathetic behavior) must be taught" (Knoff, 2003, p. 39). An example of a program which includes the direct instruction of social skills, *The Second Step* program, promotes early implementation of social skills training by using social cognitions to promote prosocial behaviors (Frey, Nolen, Edstrom, & Hirschstein, 2005).

Frey et al. (2005) conducted a study on elementary school students (K-6) to determine the effectiveness of the *Second Step* program. The study found that students who received the social skills training showed improvement in social behavior, required less adult intervention, and demonstrated less aggression and interacted more cooperatively.

Like antisocial behaviors, prosocial behaviors or social skills are linked to educational success (Frey et al., 2005) and demonstrate stability over time (Eisenberg et al., 1999). Prosocial behavior has been tied to high grades (Frey et al.; Wentzel, 1996; Wentzel & Wigfield, 1998) and peer acceptance (Frey et al.; Wentzel & Erdley, 1993). Promising responses to social skills instruction and the link to desired academic outcomes, suggests that early social skills interventions may provide long-term benefits (reference needed).

*Self-monitoring*. Popular responses to reduce problematic behaviors include contingency management interventions such as positive reinforcement or response cost. Contingency management programs place the larger part of the responsibility on the teacher, which requires the teacher to manage and respond to both positive and negative behaviors. This usually creates challenges because of the resources the demands placed on teachers (Lane, Wehby, & Barton-Arwood, 2005). Self-management techniques have become an alternative to these interventions by relieving the teachers and placing the responsibility on the person in control of the behavior (the student). This tactic requires buy-in from the student and creates a more invested attitude (Hoff et al., 1998).

The procedure of self-monitoring was defined by Prater and Hogan (1992) as including two parts. First, self-monitoring includes recognizing the occurrence of a target behavior. For example, a student may be taught to stop and self-assess whether or not they were in their seat, paying attention, or keeping their hands to themselves, etc. This initial step may begin with a

verbal prompt or visual cue. The second step, asks the student to record the frequency, duration, or intensity of the behavior. The purpose of this procedure is to help an individual become more aware of his or her behaviors, see how these behaviors affect their performance, and ultimately reduce or eliminate the behavior (Prater & Hogan, 1992).

One benefit of self-monitoring is that it can provide immediate consequences (Mace, Belfoire, & Hutchinson, 2001; Reid, Trout, & Schartz, 2005). After the visual or verbal cue is made, the child immediately becomes aware of the behavior. Prater and Hogan (1992) mentioned that an additional benefit of self-monitoring includes increased self-awareness and increased probability of maintaining the behaviors in all settings. Self-monitoring brings a sense of empowerment to the child, which can be used to teach the student to take control over his or her actions. "Students who have control over their own behavior are able to learn and to behave appropriately even when adult supervision is not available" (Prater & Hogan, 1992, p. 44).

Self-monitoring has been a successful intervention for a range of students, including students with behavior disorders (McLaughlin, Krappman, & Welsch, 1985; Osborne, Kosiewicz, Crumley, & Lee, 1987; Prater, Joy, Chilman, Temple, & Miller, 1991). When teaching students with behavior problems to monitor their behaviors, it is not uncommon that the child is unaware how often these behaviors occur or the degree of intensity. This recognition is sometimes enough to help the student lessen the target behavior and increase the frequency of the positive replacement behavior.

A study conducted by Prater and Hogan (1992) was designed to determine the effectiveness of self-monitoring behaviors. It was a single-subject case study with a 14-year-old Caucasian male who demonstrated a history of school problems such as impulsivity and learning problems. He was classified as having a learning disability and behavior disorder. The student

was provided a description of on-task behavior and behaviors were modeled in his special education classroom. He tracked his behaviors in the resource classroom and the general education math classroom. The student was given audio prompts and was instructed to monitor if he was working. This study provided evidence that a student with a learning disability or behavior disorder can learn to use self-monitoring strategies. It also demonstrated the ability to apply these strategies in various settings. The student was able to increase homework completion in his math class from 7 problems to 25, and also increased math accuracy by over two percentage points

A second single-subject study conducted by DiGangi, Maag, & Rutherford (1991) gathered data regarding on-task behavior and homework completion from two female students with learning disabilities, ages 10 and 11. The study implemented four phases on an invention: (a) self-monitoring, (b) recording frequency, (c) self-reinforcement, and (d) self-evaluation. Each of the two students had gains across all of the levels of the intervention. The results showed that self-monitoring, paired with processing and evaluation was a very effective intervention for the students. The two students in the study continued to have better on-task behavior after the intervention was removed during the fading stage. With off-task behaviors being one of the most common referral reasons for behavior problems, self-monitoring proves to be an important component to improving educational outcomes.

Students who learn to apply self-monitoring techniques tend to demonstrate improvements in on-task behaviors, homework completion, and overall academic achievement that can be transferred to a variety of settings (DiGangi, Maag, Rutherford, 1991; Prater & Hogan, 1992; Prater et al., 1994). A study conducted by Hoff, et. al. (1998) identified three students with behavior problems. These elementary students demonstrated aggressive behaviors

in math, social studies, and recess. The three students and their teachers were asked to rate their behaviors during math. Each day, students had a 20-minute session to initiate self-evaluation while matching the accuracy of their ratings to the teacher's. The results of the intervention showed that one student had a slight decreasing trend in level of disruptive behavior. Across all three settings, each student showed a decrease in disruptive behaviors. These findings showed that the self-management intervention matched with teacher and student evaluation improved the level of disruptive behavior. A technique that was implemented in the math classroom was also effective in reducing the target behavior in two other settings (recess and social studies).

Research also supports the long-term effects of self-monitoring. When compared to contingency management programs, self-monitoring interventions are more effective and have a greater generalization potential (Hoff, et. al, 1998; Fantuzzo & Polite, 1990). The ability to generalize self-monitoring is an important key in the overall reduction of inappropriate behaviors.

*Emotional awareness*. With the responsibility of teaching children social and emotional skills being placed on the schools, social and emotional learning (SEL) has become more of a focus in children's education (Greenberg, Weissberg, O'Brien, Zins, Frericks, Resnik, et. al., 2003). SEL is generally characterized as a third component to academics and behavior management. It is most effective when it exists as the middle support that bridges academics with behavior management (Merrell, Juskelis, Tran, & Buchanan, 2008). SEL curricula focuses on providing tools to establish emotional awareness, social and life skills, while integrating cognitive approaches that help prevent negative perceptions. Lessons often focus on managing and regulating emotions, viewing others' perspectives, and making and evaluating responsible decisions.

According to Merell et al. (2008), SEL is a positive and proactive method which focuses on creating an environment that has clearly defined expectations, promotes positive behaviors by reinforcing expected behaviors, and allows for practice and modeling of the appropriate behaviors. This approach decreases the likelihood of negative behaviors, fosters resiliency, and promotes success.

The effectiveness of SEL programs has been supported by research, which has found that SEL promotes a lower drop out rate while enhancing students' relationships with peers and teachers (Greenberg, Weissberg, O'Brien, Zins, Fredericks, & Resnik, 2003; Hamre & Pianta, 2005; Ragozzino, Resnik, O'Brien, & Weissberg, 2003). The *Strong Kids* program (Merrell et al., 2008) is comprised of 12 sessions including anger management, identification of emotions and how we react to them, and stress management. It combines education strategies with cognitive-behavioral methods and is designed to increase students' emotional knowledge and awareness and decrease their negative affect and emotional distress. An evaluation of the *Strong Kids* and *Strong Teens* curriculum (Merrell et. al.) looked at three different groups of students (120 middle school students, 65 junior high school students, 14 high school students). The middle school and junior high students were a part of the general education student population. The high school students were taken from the special education program and were students classified as EBD. The students participated in one-hour weekly lessons.

Data were gathered using a pre and post-test where the students responded to a number of questions regarding their knowledge of healthy social-emotional behavior and current levels of internalizing symptoms. The group of middle school students showed large and statistically significant gains in knowledge but not a statistically significant change in self-reported problem symptoms. Significant and clinically relevant improvements in social-emotional knowledge and

decreases in negative social-emotional symptoms were made by the group of junior high students. The third group of students (who were classified as EBD) demonstrated statistically significant and clinically relevant changes in their knowledge of social-emotional behavior/coping strategies and in their negative symptoms (Merrell et al., 2008). Based on this data, the *Strong Kids* and *Strong Teens* program had positive effects on students' emotional awareness and symptoms in the case of the students with EBD.

Research in the areas of social skills instruction, self-monitoring, and emotional awareness has shown that there are positive outcomes to these early interventions. While this data is promising, research on the long-term effects of prevention efforts or early interventions are minimal. Longitudinal research is necessary to support the overall success and the continuation of PBS and early intervention.

*Statement of Problem*

Youth with behavior and emotional problems experience many challenges in educational settings. A continuum of services that is responsive to the needs of the students is frequently not available (Eber & Nelson, 1997; Sugai, Horner, Dunlap, Hieneman, Lewis, Nelson, et al., 1999). Students with behavior problems spend significantly less time receiving instruction (Scott et al., 2002). With many students qualifying for educational services under the classification of Emotional Disturbance, only a small percentage are actually receiving services (Walker et al., 2005). The remainder of the students with behavior problems typically experience reactive behavioral consequences (Lewis-Palmer et al., 1999). With such a lack of services, many behaviors are increasing in severity before they are acknowledged (Lane, 2007), which increases the importance of early identification and interventions. The lack of research on early intervention and its long-term success adds to the importance of this study.

*Statement of Purpose*

As behaviors are ignored, they often become more severe and more difficult to address (Lane, 2002). Unfortunately, behavior problems are usually addressed in a more reactive manner as opposed to a preventative method. A delay in intervening can become problematic, increase the time required to address student needs, and require more intensive and intrusive interventions (Cartledge, 2005). PBS has recently become an alternative to reactive measures, focusing on early interventions and prevention methods with tiered levels of intervention. Knowing that behaviors are progressive in nature, it becomes important to address the effectiveness of early interventions.

This study aims to add to the current research on the long-term effectiveness of early intervention by analyzing archival data from a previous intervention study. More specifically, long-term effectiveness was measured using four years of post intervention data. The intervention consisted of social skill instruction, self-monitoring behaviors, and emotional awareness training. Teachers' perspectives of the students' behaviors, GPAs, absences, and office discipline referrals were analyzed as a measure of the intervention's effectiveness.

*Research Questions*

This study analyzed the long-term effects of a selective PBS intervention and looked at the different responses between the groups. There were two broad research questions that were each broken down into thirteen more specific research questions based on the dependant variable, for a total of twenty-six specific research questions.

*Primary research question*. What are the long-term effects of implementing a selective PBS intervention that incorporated social skill instruction, emotional learning, and self-monitoring on at-risk students' academic performance and social behaviors following

intervention as measured by GPA, office discipline referrals (ODR), absences, and behavior rating scales?

*Secondary research question*. Are there differences between students identified as internalizers and externalizers in the response to a selective PBS intervention that incorporated social skill instruction, emotional learning, and self-monitoring?

# METHOD

## *Participants*

The participants of this study included students chosen from a school-wide screening conducted at the end of the 2003 year at a middle school and junior high school. The teachers of the students participated by completing a screening process for all students in their classes. This process will be described later in the method section. The participants of this study were 126 middle school (School A) or junior high (School B) students who were identified as at-risk through a teacher-nomination screening process. Of the participants, 79% were male and 21% were female. The students' ethnicity included Caucasian (92%), Hispanic (8%), and American Indian (1%), and 43% of students were reported as receiving free or reduced lunch. Of the 126 participants, 27 were 6th grade students, 33 were in the 7th grade, 40 were 8th grade students, and 26 were in the 9th grade.

## *Setting*

The students attended School A or School B which are in the same school district in a western state in the United States. School A had approximately 1151 students and 49 teachers. The ethnic diversity of the school included: Caucasian (89%), Hispanic/Latino (8%), American Indian (2%), and 1% were classified as Other. A total of 22% of students in the school were eligible for free or reduced lunch. School B had approximately 1057 students enrolled with the ethnic breakdown as follows: 93% Caucasian, 4% Hispanic/Latino, 2% American Indian, and 1% Other. There were 40 teachers and approximately 35% of the students attending School B qualified for free or reduced lunch.

*Measures and Data Collection*

The participants of this study were selected during a school-wide screening. Students were identified as at-risk using a modified Systematic Screening for Behavior Disorders (SSBD) procedure (Walker & Severson, 1992), which was completed by the classroom teachers. Completion of the SSBD included answering questions about their students' behaviors. Teachers are in a particularly good position to answer questions about students' behaviors because children spend a large amount of time in school (Auger, 2004) and are likely know the students better than other adults except the students' parents (Clarizio, 1994). The purpose of a universal screening measure is to identify students who may need further intervention. Early identification assists in introducing early interventions at times when behaviors are more receptive to interventions (Walker, 1998). The SSBD "illustrates multiple gating models of screening and assessment that accomplish the universal screening of all students in a classroom by incorporating traditional assessment tools (teacher nominations) into an integrated assessment system with screening criteria and cutoff points established for each stage" (Severson, Walker, Hope-Doolittle, Kratochwill, & Gresham, 2007, p. 208). It screens for internalizing behaviors as well as externalizing behaviors. Internalizing behaviors are characterized by phobia, depression, anxiety, and isolation from peers for students in grades K-6. Externalizing behaviors are comprised of aggression, hyperactivity, noncompliance, and other antisocial behaviors (Severson, et. al., 2007).

Teachers also completed a 33-item checklist about the presence of behaviors such as being aggressive or cruel to animals, which makes up the Critical Events Index of the SSBD Stage Two. The Cumulative Frequency Index uses a Likert-type scale representing the frequency of 12 adaptive behaviors (i.e., follows rules) and 11 maladaptive behaviors (i.e., manipulating

others) (Brown-Chidsey, 2007) which is also part of the SSBD Stage Two. Brown-Chidsey reports that the internal consistency is usually above .80 (Walker & Severson, 1992, 1994). However this measure of internal consistency applies to an elementary school sample. For secondary students the internal consistency was .83 or above (Caldarella et al., 2008).

A series of studies have shown the SSBD scales to have significant correlation with other behavioral adjustment measures (Brown-Chidsey, 2007; Walker & Severson, 1992). One study conducted by Caldarella et al. (2008) demonstrated emerging validity evidence of the SSBD when used in screening middle school and junior high-aged students. The research found that teacher's nominations for externalizing or internalizing students correlated with the scores on the Teacher Rating Form (TRF). The TRF of the Achenbach Systems of Empirically Based Assessment (ASEBA; Achenbach & Rescorla, 2001) is designed to gather teachers' perceptions of children's academic abilities, adaptive functioning, and behavioral/emotional concerns. A correlation coefficient of .51 was found between the SSBD Externalizing subscale and the TRF Externalizing scale, and a coefficient of .53 between the SSBD Internalizing subscale and TRF Internalizing scale. In this study, multiple teachers of the participants were asked to complete the SSBD. When looking at the Maladaptive and Critical Events Internalizing subscale scores, findings indicated that teachers' responses correlated when identifying at-risk students.

Shortly after the intervention began, teachers completed yearly rating forms on the students' behaviors. *T* scores are assigned to the Internalizing, Total Problems, and Externalizing scales on the TRF. *T* scores are standardized scores with a mean of 50 and a standard deviation of 10. Analysis reported in the ASEBA Manual has shown that the "most accurate cutpoints for discriminating between referred and nonreferred children are at about the 80th to the 84th percentiles of the normative sample" (Achenbach & Rescorla, 2001, p. 96). The ranges for *T*

scores were then set based on those cutpoints with *T* scores of 60 through 63 being borderline and the clinical range at $T \geq 64$.

The TRF consists of 118 problem items along with items concerning behaviors that parents would not observe, such as difficulty following directions, disturbs other pupils, and disrupts class discipline. Teachers use a three-point scale to rate the child for how true each item is now or was within the past two months. The TRF yields scores for Academic Performance, Total Adaptive Functioning, and subscales that include Internalizing, Externalizing, and Total Problems. The Internalizing scale is comprised of the Anxious/Depressed, Withdrawn/Depressed, and Somatic Complaints syndromes. The Externalizing category is comprised of two syndromes (Rule-breaking Behavior and Aggressive Behavior). The ASEBA Manual reports that the Internalizing category reflects problems within the self, while the Externalizing grouping represents conflicts with other people. The Total Problems scales is comprised of the sum of all specific items on the form in addition to the highest score given to any additional problems on the open-ended item 113.

Additional measures were collected annually from students' school records. This data included frequency counts on ODR, tardies, and absences for the entire school year. Suspended and unexcused absences, along with tardy counts were collected by class period and summed for an annual total. End-of-year GPAs were also gathered from students' school data. This school data, combined with the TRF scores were compiled prior to the implementation of the intervention in 2004 and again in 2008.

*Procedures*

The screening process was conducted in December 2003. After students were identified as at-risk using the SSBD screening tool, researchers obtained parent consent and student assent

for 126 students to participate in the research. Of the 126 students, 113 completed the study and had data available for all five years. The participants were divided into control and treatment groups where 75 were assigned to one of the three treatment groups and 38 were in a placed in a control group. Each group was subcategorized into externalizers and internalizers based on the results of the SSBD and TRF. The treatment groups consisted of 42 externalizers and 33 internalizers, and the control group was comprised of 17 externalizers and 21 internalizers.

Participants receiving the intervention were provided either one, two, or three school semesters of the intervention. The intervention was offered at the middle school and junior high as a general education elective class. The curriculum included social skills instruction, self-management strategies, and academic skills while promoting emotional resiliency. A few of the areas on which the social skills lessons focused included instructing students how to ask for help, how to resolve conflicts, and how to start a conversation. The skills were demonstrated and reviewed by the teachers with opportunities for the students to demonstrate the skills or discuss situations when the skills could be implemented.

Self-management strategies were used in helping the students evaluate their behavior by using a predetermined rating system. A reward system was used based on the students' ability behave appropriately and the frequency of their scores matching their teachers' perceptions of their behaviors.

*Data Analysis*

Scores from the TRF, students' GPA, ODR, and attendance at pretest, during intervention, and posttest points were analyzed using a mixed-design (or split plot) ANOVA. A split plot is used when there is one or more repeated measures and one or more between subjects measure (The University of Nottingham, School of Psychology, n.d.). Participants were first

identified as either receiving the intervention or being in the control group. Using the pretest and four posttest measures, analyses determined if there was differential change over time according to group membership. The analysis looked at the behavior trend across the five years of the study. The participants were then further divided into a second category. Based on the reports from the screening measure (SSBD) students were categorized as either an internalizer or externalizer. Comparing the internalizing control group with the internalizing treatment group and comparing the externalizing control group with the externalizing treatment group provided insight to the effectiveness of the intervention across two different behavior types. Participants receiving the intervention were provided either one, two, or three school semesters of the intervention.

The split plot ANOVA results were reported in terms of the main effect for group, main effect for time, and the interaction between group and time. The pre and posttest values were determined by figuring each group's mean for that variable. The primary focus was on the interaction term which revealed the differential change over time according to group membership. If no interaction term was present, the main effects were evaluated. A separate ANOVA was conducted for each of the dependent variables.

# RESULTS

The objective of this study was two fold: a) to determine what effects the intervention had on each group according to Grade Point Average (GPA), absences, Office Discipline Referrals (ODR), tardies, and Achenbach Teacher Rating Form (TRF) scores; and b) to determine whether there were any differences in outcomes between internalizers or externalizers. Data used in this analysis were collected at the pre-intervention stages as well as at the post-intervention stage, occurring five years after the start of the study.

In this analysis, ANOVA measures were completed in order to determine if the four groups changed differentially over time. Table 1 provides a summary of the descriptive information contained in this portion of the analysis. The total number of participants with pre-intervention data in 2003 and post-intervention data in 2008 was 113. Of these participants, 80% were male and 20% were female. In addition, 92% were Caucasian and 8% were Hispanic, while 48% were considered internalizers and 52% externalizers. Participants were divided into one control group or one of three treatment groups. The control group represented 34% of the participants, while the treatment groups (one, two, and three semesters) represented 35%, 12%, and 19%, respectively.

## *Data Analysis of Research Questions*

*Research question one*. What are the long-term effects of a selective PBS intervention on at-risk students' academic performance and social behaviors following intervention as measured by GPA? If the intervention was effective, participants' GPAs should increase at a higher rate, indicating better self-management skills when compared to the control group.

A 4 x 2 mixed design ANOVA was calculated to determine if there was differential change in GPA over time according to treatment group membership. The four groups were no

Table 1

*Descriptive Characteristics for Independent Variables by Treatment Length*

| Descriptive Statistics | Control | One Semester | Two Semesters | Three Semesters |
|---|---|---|---|---|
| | n= 38 | n= 39 | n= 22 | n= 14 |
| Gender | | | | |
| Male | 30 | 31 | 18 | 11 |
| Female | 8 | 8 | 4 | 3 |
| Ethnicity | | | | |
| Caucasian | 36 | 35 | 20 | 13 |
| Hispanic | 2 | 4 | 2 | 1 |
| SSBD Category | | | | |
| Internalizer | 21 | 18 | 9 | 6 |
| Externalizer | 17 | 21 | 13 | 8 |

treatment (control), one, two, or three semesters of treatment. GPA was assessed at two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 2). The time x group interaction was not significant ($F(3, 65) = 1.527$, $p > .05$). In addition, the main effect for group was also not significant ($F(3, 65) = .649$, $p > .05$). The main effect for time was not significant ($F(1, 65) = 1.273$, $p > .05$).

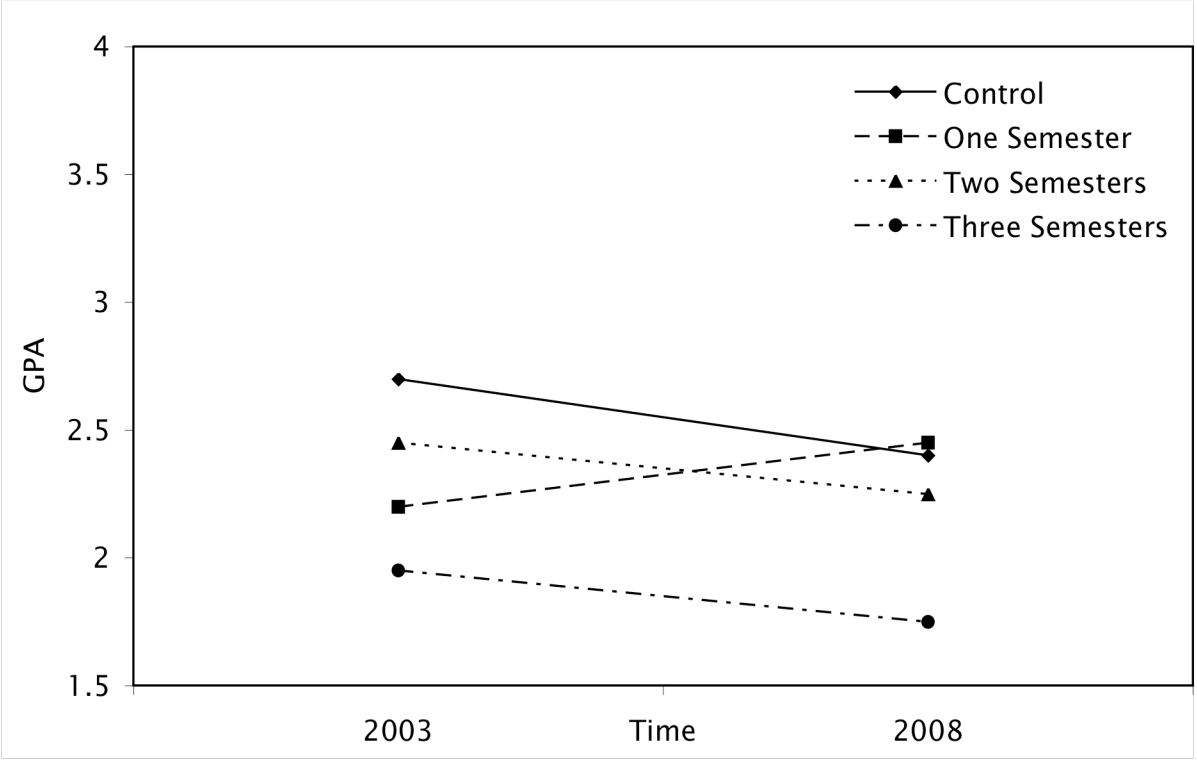


*Figure 2*. Long-term effects of a selective PBS intervention measured by GPA.

*Research question two*. What are the long-term effects of a selective PBS intervention on at-risk students' attendance office discipline referrals (ODR)? If the intervention was effective, the treatment groups' ODR would be diminished over time when compared to the control group indicating students were more likely to attend school because of the intervention.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in attendance ODR over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. Attendance ODR were assessed at two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 3). The time x group interaction was not significant ($F(3, 109) = .079$, $p > .05$). The main effect for time was not significant ($F(1, 109) = 3.482$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 109) = 1.559$, $p > .05$).

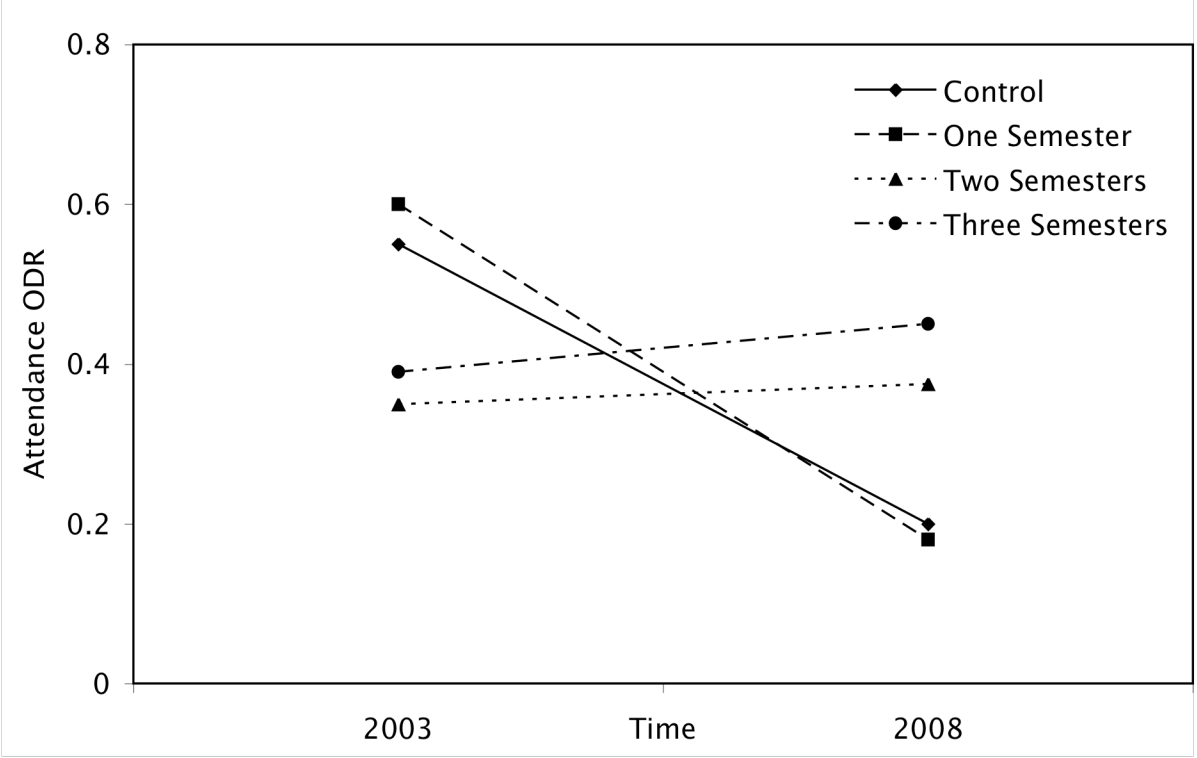


*Figure 3*. Long-term effects of a selective PBS intervention measured by attendance ODR.

*Research question three*. What are the long-term effects of a selective PBS intervention on at-risk students' behaviors following intervention as measured by disciplinary office

discipline referrals (ODR)? If the intervention was effective the treatment students should have shown significant differences from the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in disciplinary ODR over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. Disciplinary ODR were assessed at two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 4). The time x group interaction was not significant ($F(3, 109) = .770$, $p > .05$). The main effect for time was significant ($F(1, 109) = 12.772$, $p < .05$). In addition, the main effect for group was not significant ($F(3, 109) = 2.618$, $p > .05$).

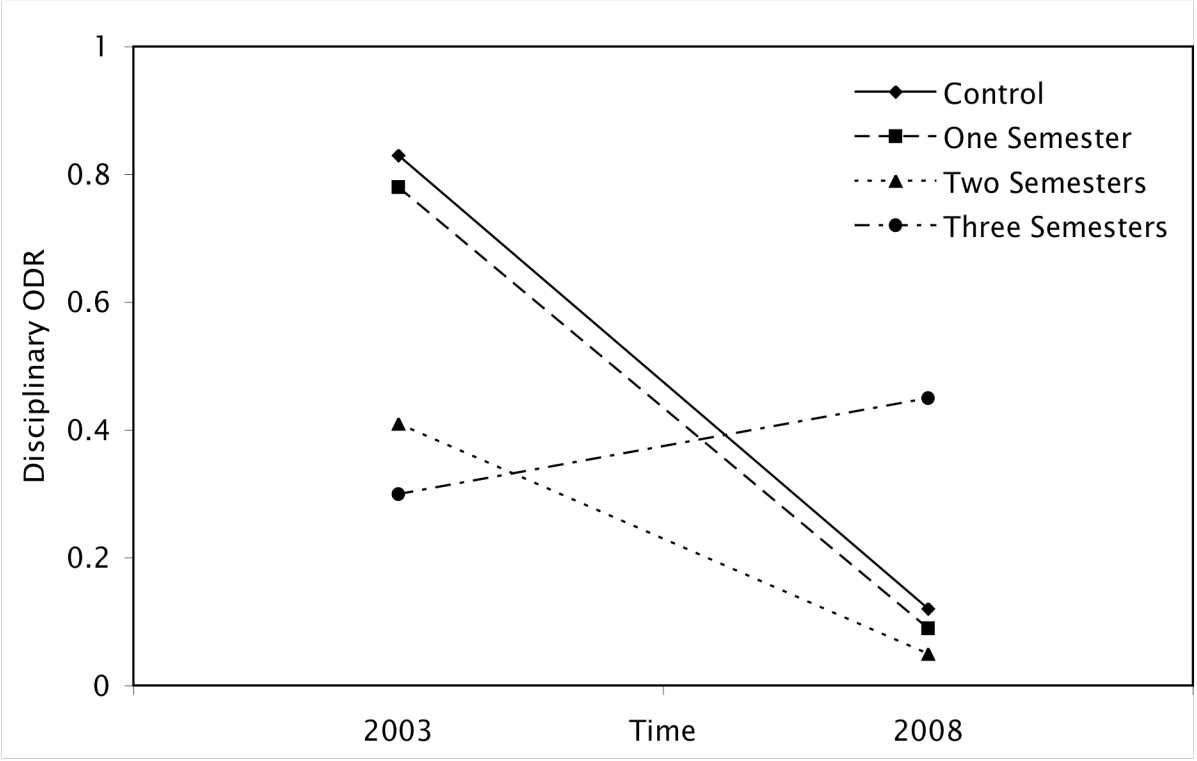


*Figure 4*. Long-term effects of a selective PBS intervention measured by disciplinary ODR.

*Research question four*. What are the long-term effects of a selective PBS intervention on at-risk students' disciplinary office discipline referrals (ODR) using absences as a covariate? If the intervention was effective the treatment students should have shown significant differences from the control group. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility that they could affect the relationship between ODR and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less ODR.

A 4 x 2 mixed design ANOVA was calculated to test if there was differential change in disciplinary ODR over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. ODR were assessed at two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 5). The time x group interaction was not significant ($F(3, 105) = .885$, $p > .05$). The main effect for time was not significant ($F(1, 105) = .496$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 105) = 2.524$, $p > .05$).

*Research question five*. What are the long-term effects of a selective PBS intervention on at-risk students' academic performance and social behaviors following intervention as measured by total office discipline referrals (ODR)? If the intervention was effective the treatment students should have shown significant differences from the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in total ODR over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. Total ODR were assessed at two time periods, which were December 2003 and May 2008. The interaction between time and

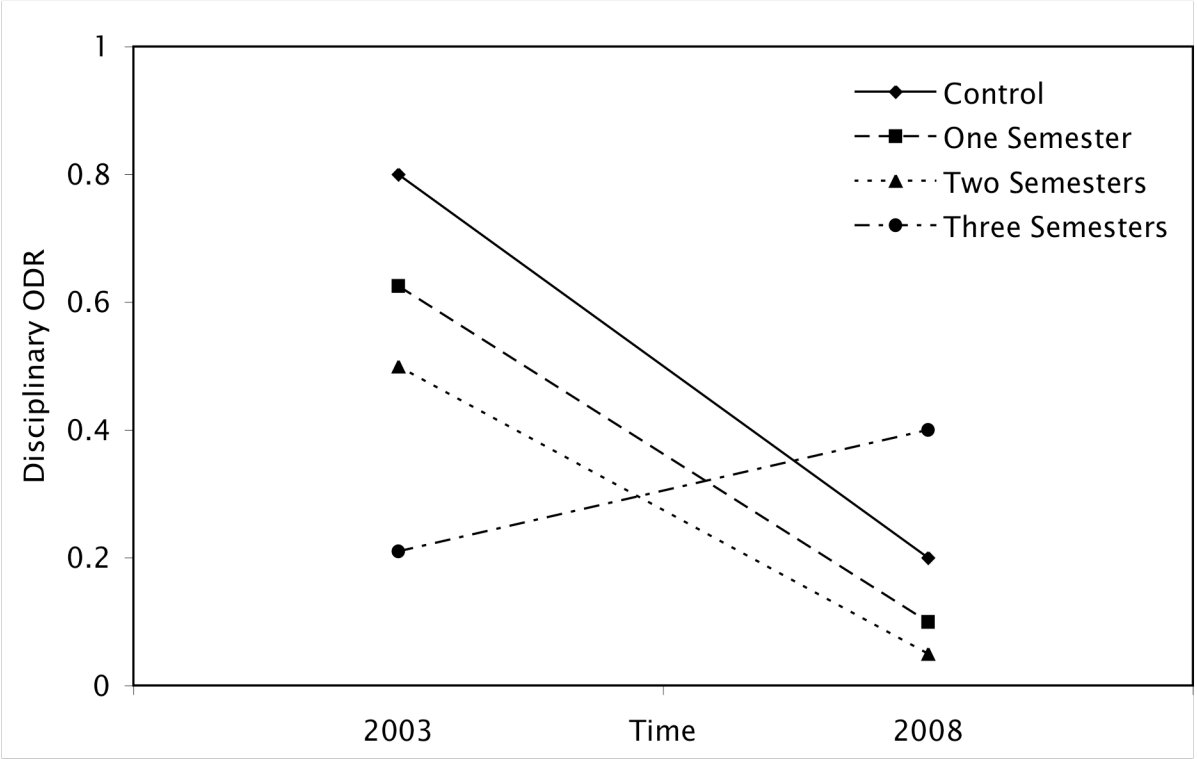


*Figure 5*. Long-term effects of a selective PBS intervention measured by disciplinary ODR with absences as a covariate.

group assessed the differential change over time (see Figure 6). The time x group interaction was not significant ($F(3, 109) = .440$, $p > .05$). The main effect for time was significant ($F(1, 109) = 10.917$, $p < .05$). In addition, the main effect for group was also significant ($F(3, 109) = 2.741$, $p < .05$).

*Research question six*. What are the long-term effects of a selective PBS intervention on at-risk students' academic performance and social behaviors following intervention as measured by total office discipline referrals (ODR) using absences as a covariate? If the intervention was effective the treatment students should have shown significant differences from

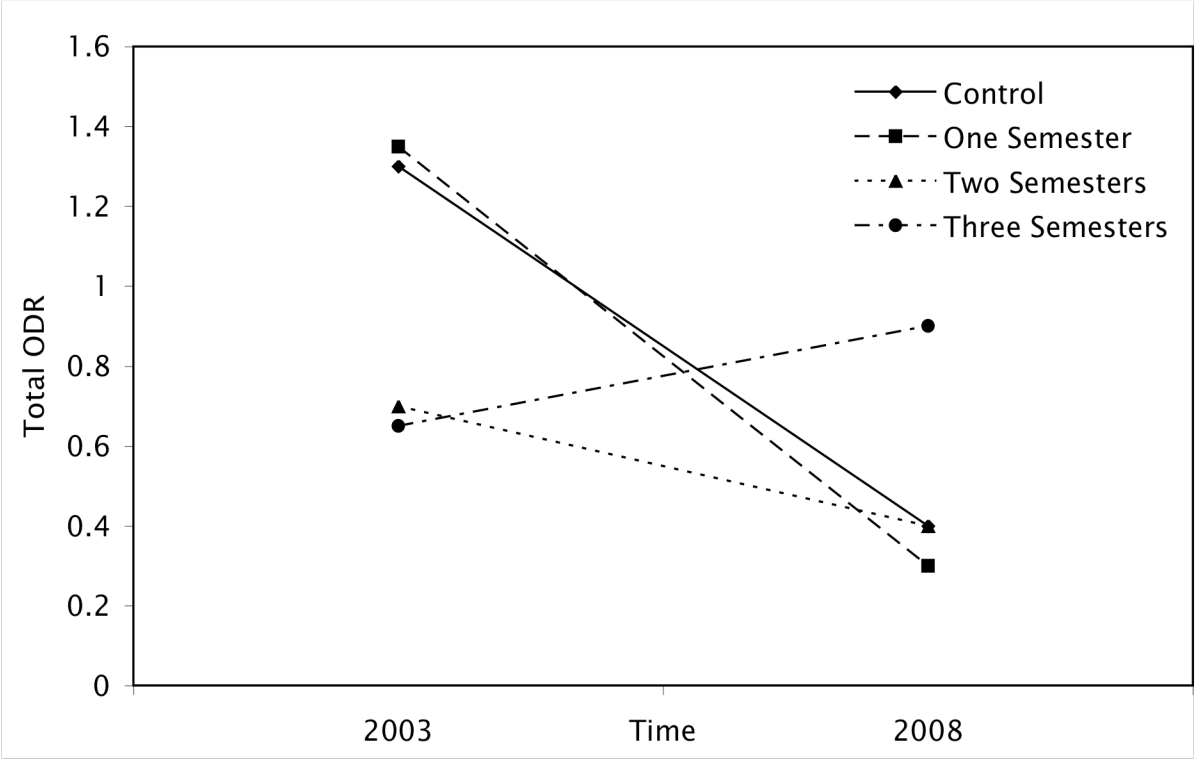


*Figure 6*. Long-term effects of a selective PBS intervention measured by total ODR.

the control group. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility that they could affect the relationship between ODR and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less ODR.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in total ODR over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. Total ODR were assessed at two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 7). The time x group interaction was not significant ($F(3, 105) = .666$, $p > .05$). The main effect for time was not significant ($F(1,$

105) = .703, p > .05). In addition, the main effect for group was not significant (F (3, 105) = 2.105, p > .05).

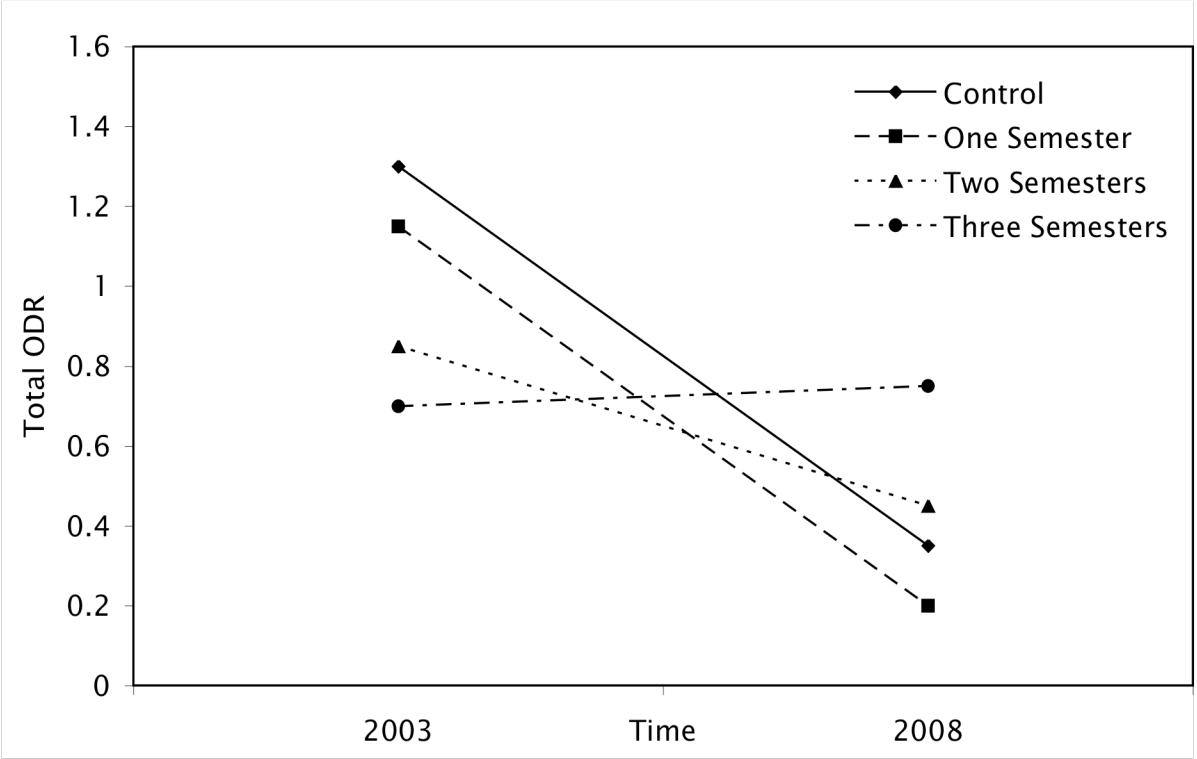


*Figure 7*. Long-term effects of a selective PBS intervention measured by total ODR with absences as a covariate.

*Research question seven*. What are the long-term effects of a selective PBS intervention on at-risk students' unexcused absences? If the intervention was effective, participants should have fewer unexcused absences than those in the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in unexcused absences over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. Unexcused absences were assessed at two time periods, which were December 2003 and May 2008. The

interaction between time and group assessed the differential change over time (see Figure 8). The time x group interaction was not significant ($F(3, 109) = .238$, $p > .05$). The main effect for time was significant ($F(1, 109) = 5.094$, $p < .05$). In addition, the main effect for group was not significant ($F(3, 109) = .455$, $p > .05$).

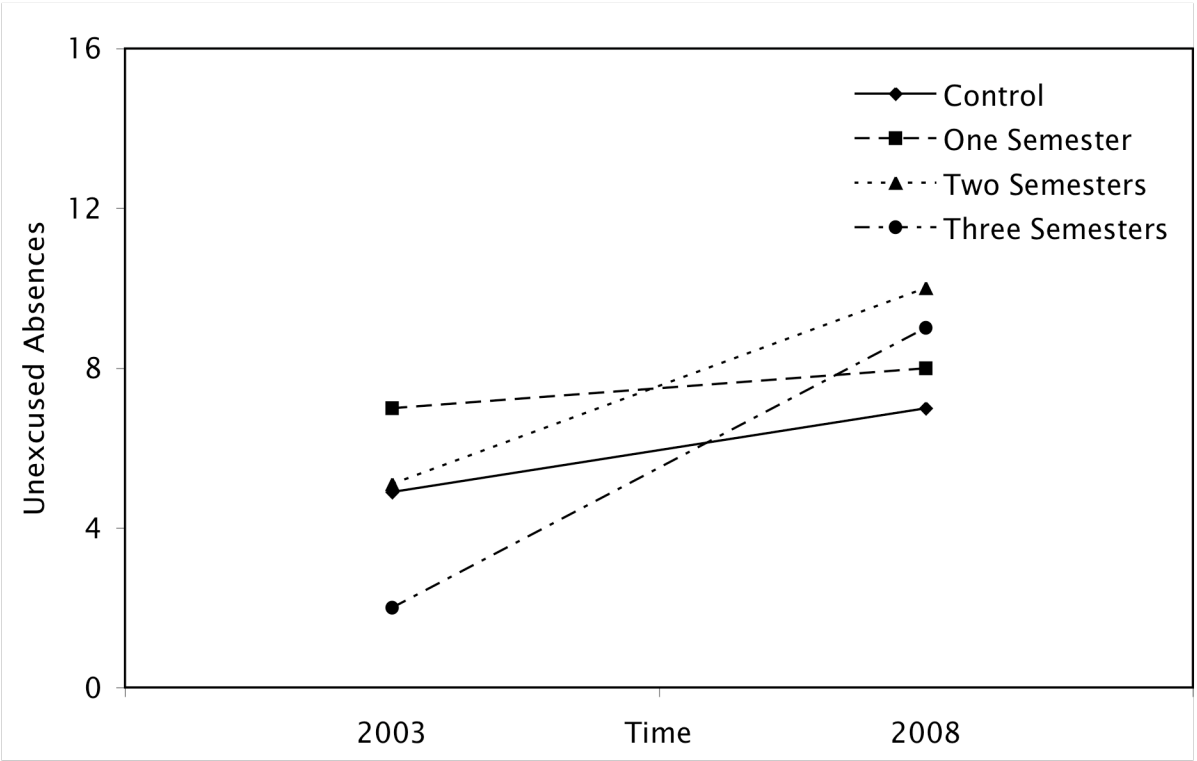


*Figure 8*. Long-term effects of a selective PBS intervention measured by unexcused absences.

*Research question eight*. What are the long-term effects of a selective PBS intervention on at-risk students' suspended absences? If the intervention was effective, participants in the control group should have had fewer suspended absences than those in the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in suspended absences over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. There were two

time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 9). The time x group interaction was not significant ($F(3, 109) = 1.057$, $p > .05$). The main effect for time was not significant ($F(1, 109) = 2.284$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 109) = 1.946$, $p > .05$).

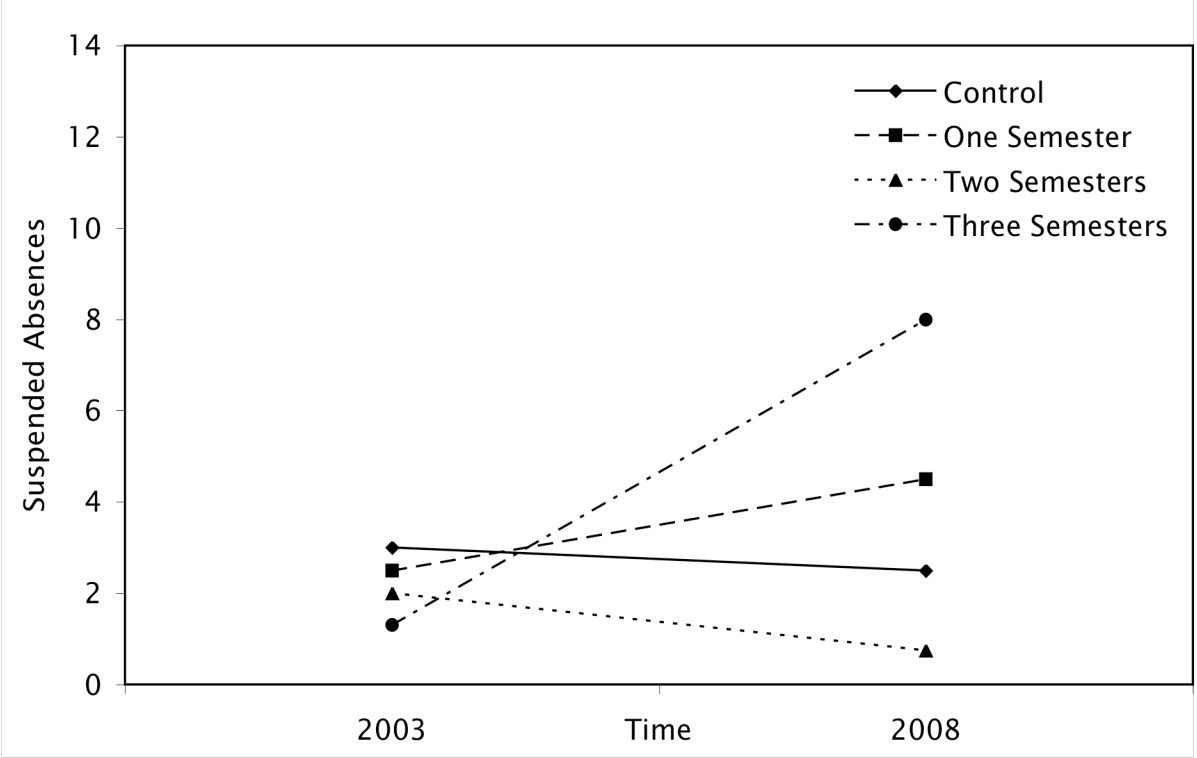


*Figure 9*. Long-term effects of a selective PBS intervention measured by suspended absences.

*Research question nine*. What are the long-term effects of a selective PBS intervention on at-risk students' tardies? If the intervention was effective, participants in the treatment group should demonstrate fewer tardies than those students in the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in tardies over time according to treatment group membership. The four groups were no

treatment (control), one, two, or three semesters of treatment. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 10). The time x group interaction was not significant ($F(3, 109) = .317$, $p > .05$). The main effect for time was not significant ($F(1, 109) = 3.124$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 109) = .469$, $p > .05$).

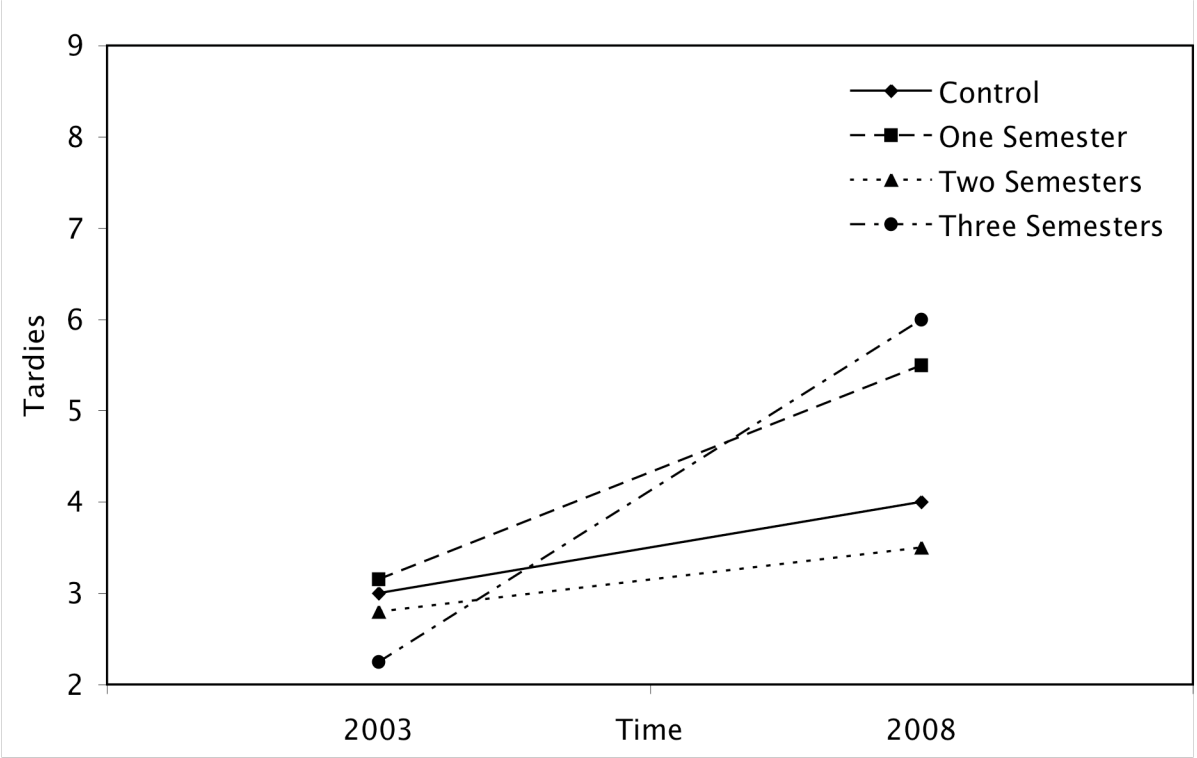


*Figure 10*. Long-term effects of a selective PBS intervention measured by tardies.

*Research question ten*. What are the long-term effects of a selective PBS intervention on at-risk students' tardies using absences as a covariate? If the intervention was effective the treatment students should have shown significant differences from the control group. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility that they

could affect the relationship between tardies and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less tardies.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in tardies over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 11). The time x group interaction was not significant ($F(3, 105) = .256$, $p > .05$). The main effect for time was not significant ($F(1, 105) = .011$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 105) = .329$, $p > .05$).

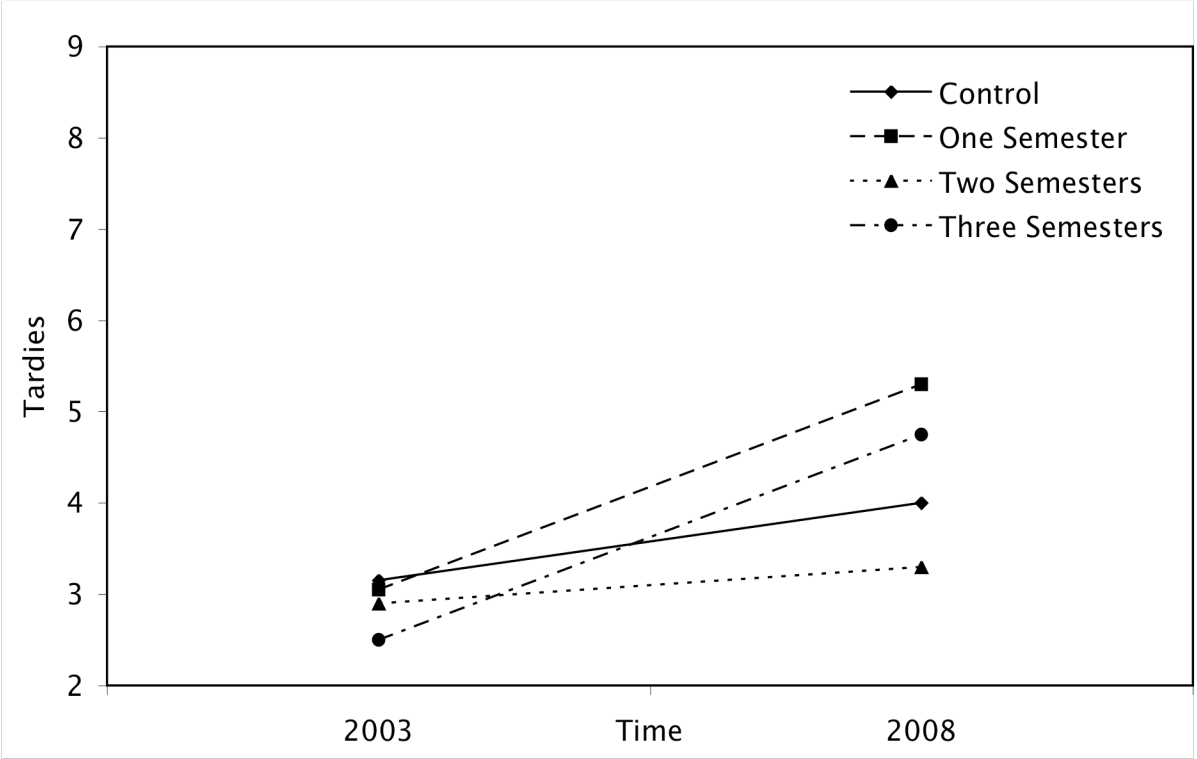


*Figure 11*. Long-term effects of a selective PBS intervention measured by tardies.

*Research question eleven*. What are the long-term effects of a selective PBS intervention on at-risk students' internalizing symptoms following intervention as measured by TRF Internalizing scores? If the intervention was effective, participants in the treatment groups should have shown a decrease in TRF internalizing scores when compared to students in the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Internalizing score over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 12). The time x group interaction was not significant ($F(3, 11) = .117$, $p > .05$). The main effect for time was not significant ($F(1, 11) = 1.191$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 11) = 1.097$, $p > .05$).

*Research question twelve*. What are the long-term effects of a selective PBS intervention on at-risk students' TRF Externalizing scores? If the intervention was effective, participants in the treatment group should have had lower TRF Externalizing scores than the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Externalizing score over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. There were two time periods, which were December 2003 and May 2008. The interaction between time and

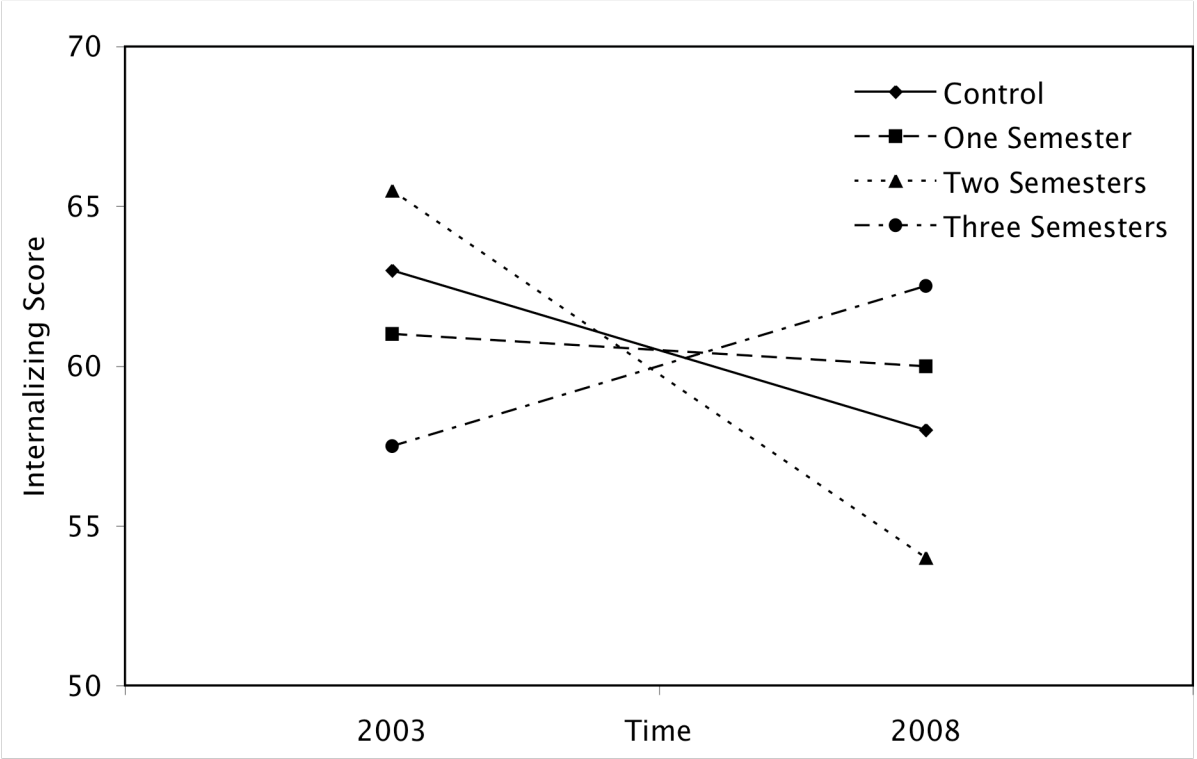


*Figure 12*. Long-term effects of a selective PBS intervention measured by TRF Internalizing scores.

group assessed the differential change over time. The time x group interaction was not significant ($F(3, 11) = .559$, $p > .05$). The main effect for time was not significant ($F(1, 11) = .115$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 11) = .819$, $p > .05$).

*Research question thirteen*. What are the long-term effects of a selective PBS intervention on at-risk students' TRF Total Problem Behavior scores? If the intervention was effective, participants in the treatment groups should have lower Total Problem Behavior scores than the control group.

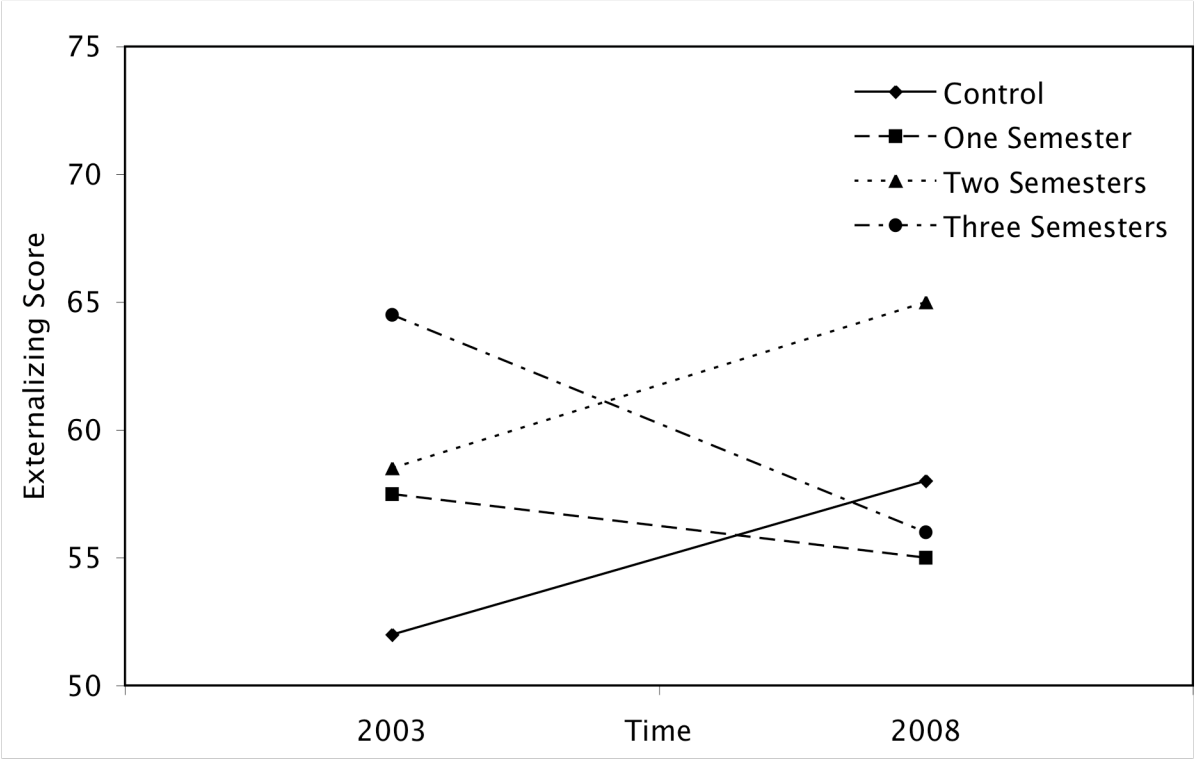


*Figure 13*. Long-term effects of PBS measured by TRF Externalizing scores.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Total Problem Behavior score over time according to treatment group membership. The four groups were no treatment (control), one, two, or three semesters of treatment. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 13). The time x group interaction was not significant ($F(3, 11) = 1.042$, $p > .05$). The main effect for time was not significant ($F(1, 11) = 1.818$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 11) = .248$, $p > .05$).

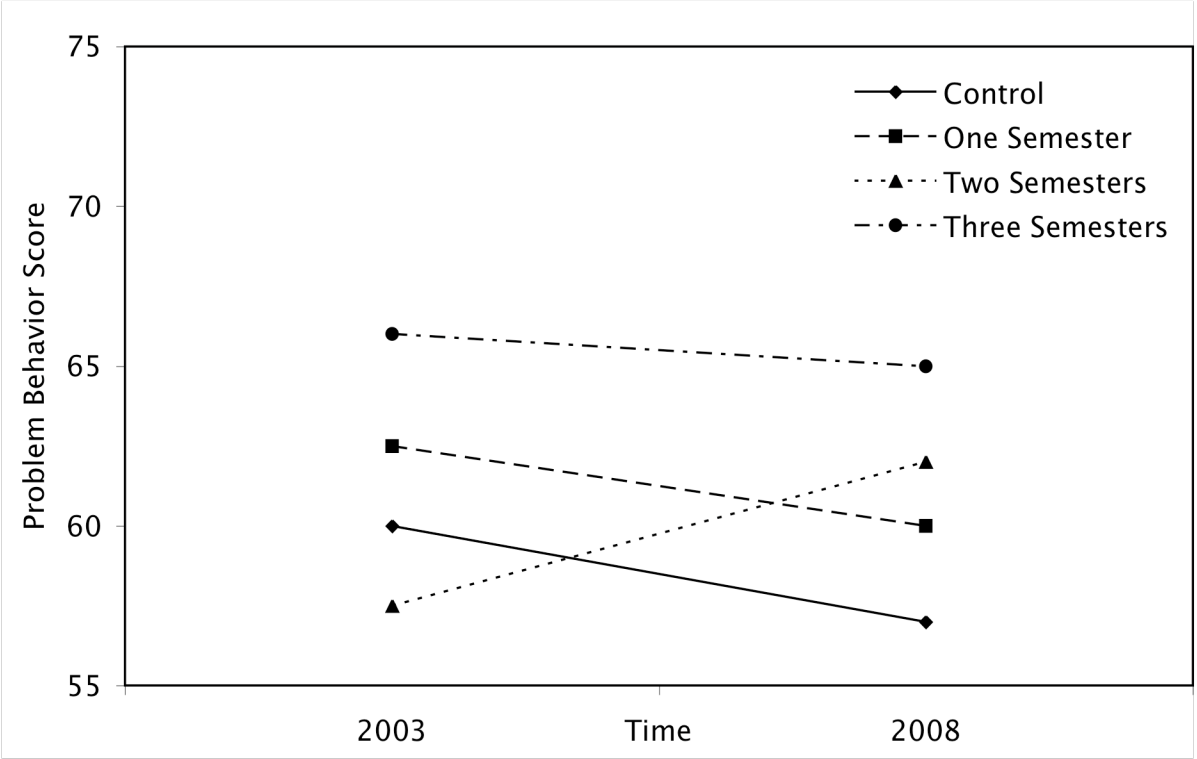


*Figure 14*. Long-term effects of a selective PBS intervention measured by TRF Total Problem Behavior scores.

*Research question fourteen*. Are there any differences in the response to intervention as measured by GPA between students identified as internalizers and externalizers. If the intervention was equally effective, then both internalizers and externalizers receiving the intervention would similarly demonstrate an increase in GPA in respect to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in GPA over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential

change over time (see Figure 15). The time x group interaction was not significant ($F(3, 73) = 2.208$, $p > .05$). The main effect for time was not significant ($F(1, 73) = 2.304$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 73) = .971$, $p > .05$).

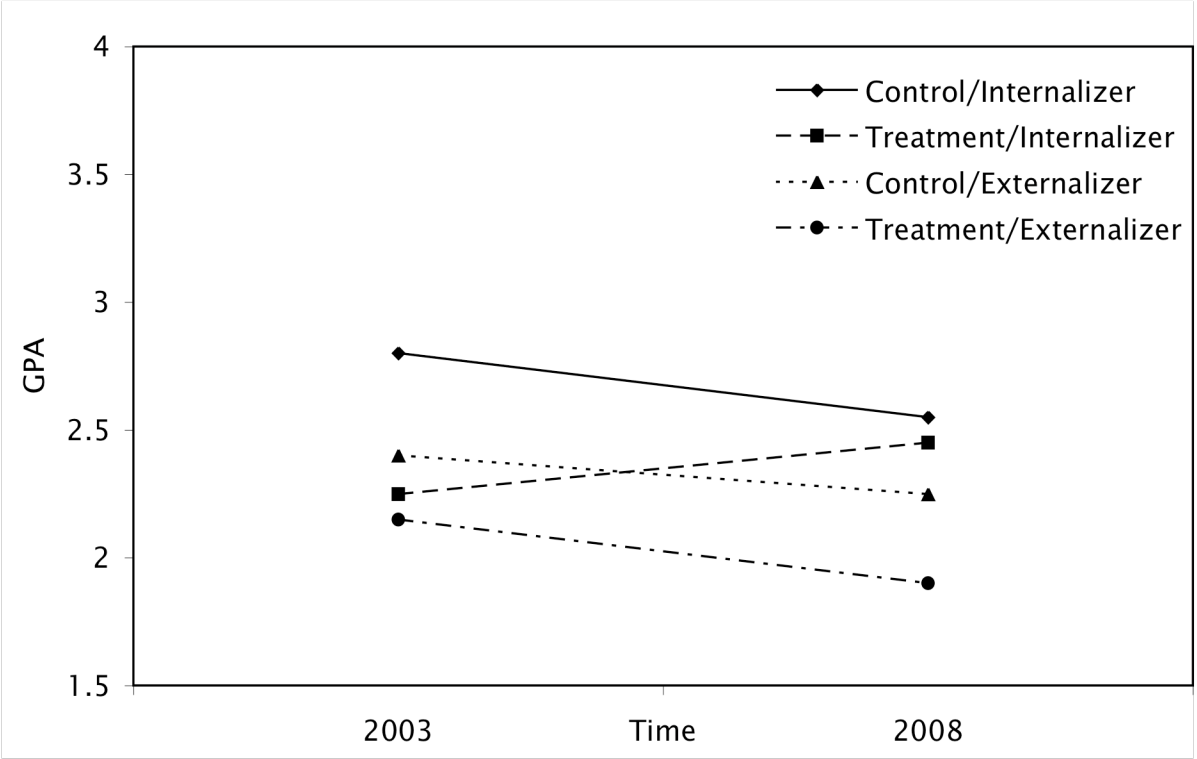


*Figure 15*. Differences in response to the intervention between internalizers and externalizers as measured by GPA.

*Research question fifteen*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by attendance office discipline referrals (ODR)? If the intervention was effective, then the internalizer and externalizers treatment groups would demonstrate similar decreases in attendance ODR when compared to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in attendance ODR over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 16). The time x group interaction was not significant ($F(3, 123) = 1.348$, $p > .05$). The main effect for time was significant ($F(1, 123) = 7.471$, $p < .05$). In addition, the main effect for group was not significant ($F(3, 123) = 1.363$, $p > .05$).

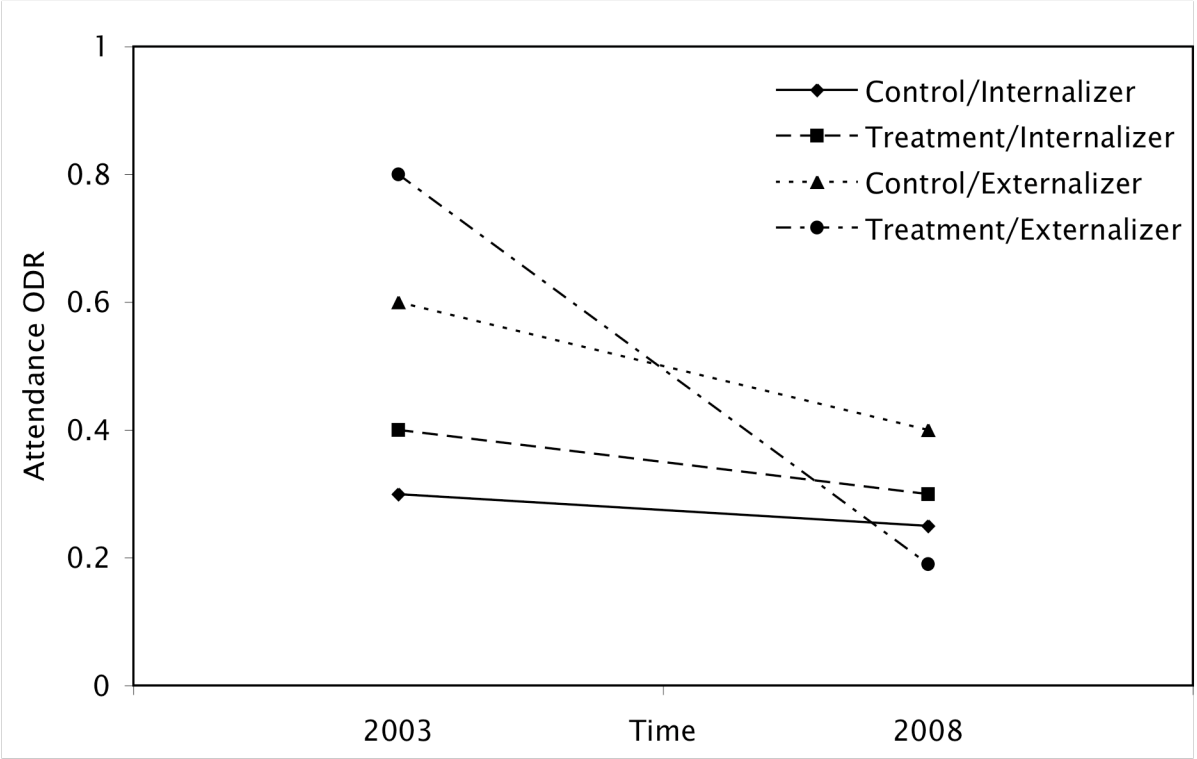


*Figure 16*. Differences in response to the intervention between internalizers and externalizers as measured by attendance ODR.

*Research question sixteen*. Are there any differences in Disciplinary ODR for students identified as internalizers and externalizers who experienced the intervention? If the intervention was effective, when compared to the control groups, both internalizer and externalizer groups receiving the intervention would demonstrate a decrease in ODR indicating better self-management skills, compliance, and decreased conflict and frustration in their relationship with teachers.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in disciplinary ODR over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 17). The time x group interaction not significant ($F(3, 123) = 12.655$, $p > .05$). The main effect for time was significant ($F(1, 123) = 33.994$, $p < .05$). In addition, the main effect for group was significant ($F(3, 123) = 6.241$, $p < .05$).

*Research question seventeen*. Are there any differences in Disciplinary ODR for students identified as internalizers and externalizers who experienced the intervention using absences as a covariate? If the intervention was effective, when compared to the control groups, both internalizer and externalizer groups receiving the intervention would demonstrate a decrease in ODR indicating better self-management skills, compliance, and decreased conflict and frustration in their relationship with teachers. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility that they could affect the relationship between ODR and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less ODR.

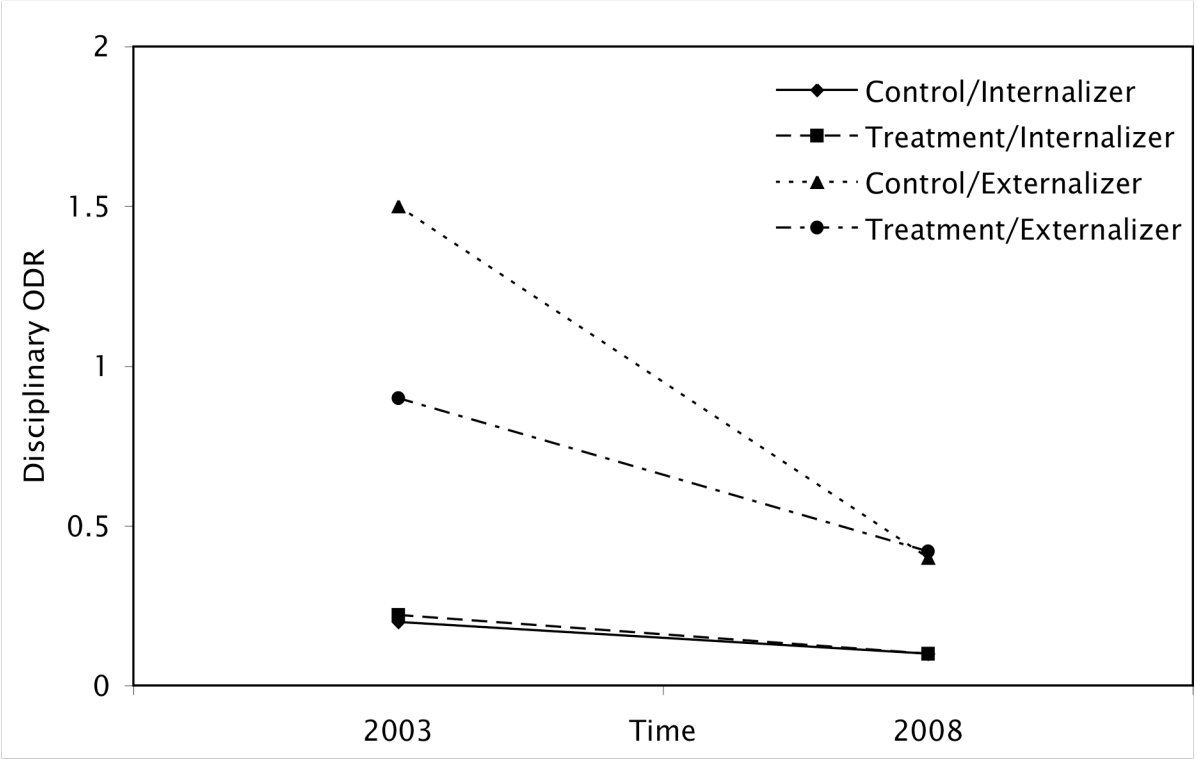


*Figure 17*. Differences in response to the intervention between internalizers and externalizers as measured by disciplinary ODR.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in disciplinary ODR over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 18). The time x group interaction was significant ($F(3, 119) = 10.804$, $p < .05$). The main effect for time was significant ($F(1, 119) = 6.950$, $p < .05$). In addition, the main effect for group was significant ($F(3, 119) = 5.468$, $p < .05$).

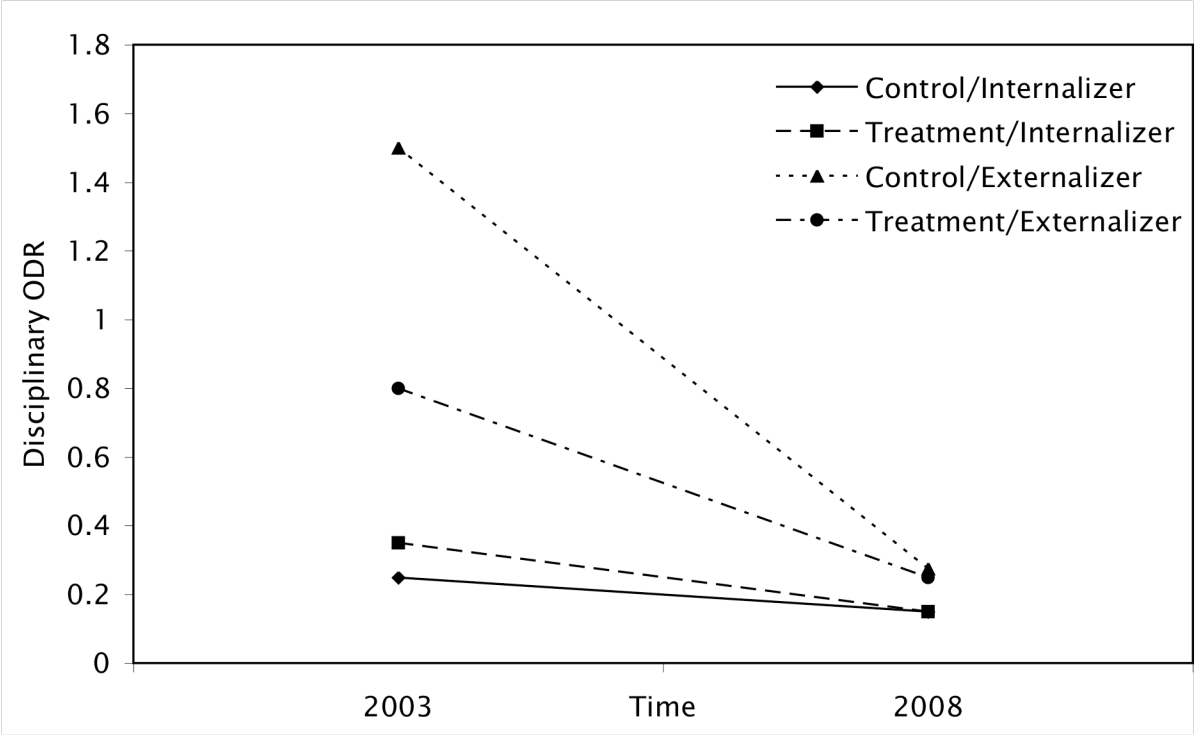


*Figure 18*. Differences in response to the intervention between internalizers and externalizers as measured by disciplinary ODR.

*Research question eighteen*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by total office discipline referrals (ODR)? If the intervention was effective, then the internalizer and externalizer groups receiving the intervention would demonstrate a decrease in ODR when compared to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in total ODR over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential

change over time (see Figure 19). The time x group interaction was significant ($F(3, 123) = 8.512$, $p < .05$). The main effect for time was significant ($F(1, 123) = 27.124$, $p < .05$). In addition, the main effect for group was also significant ($F(3, 123) = 4.823$, $p < .05$).

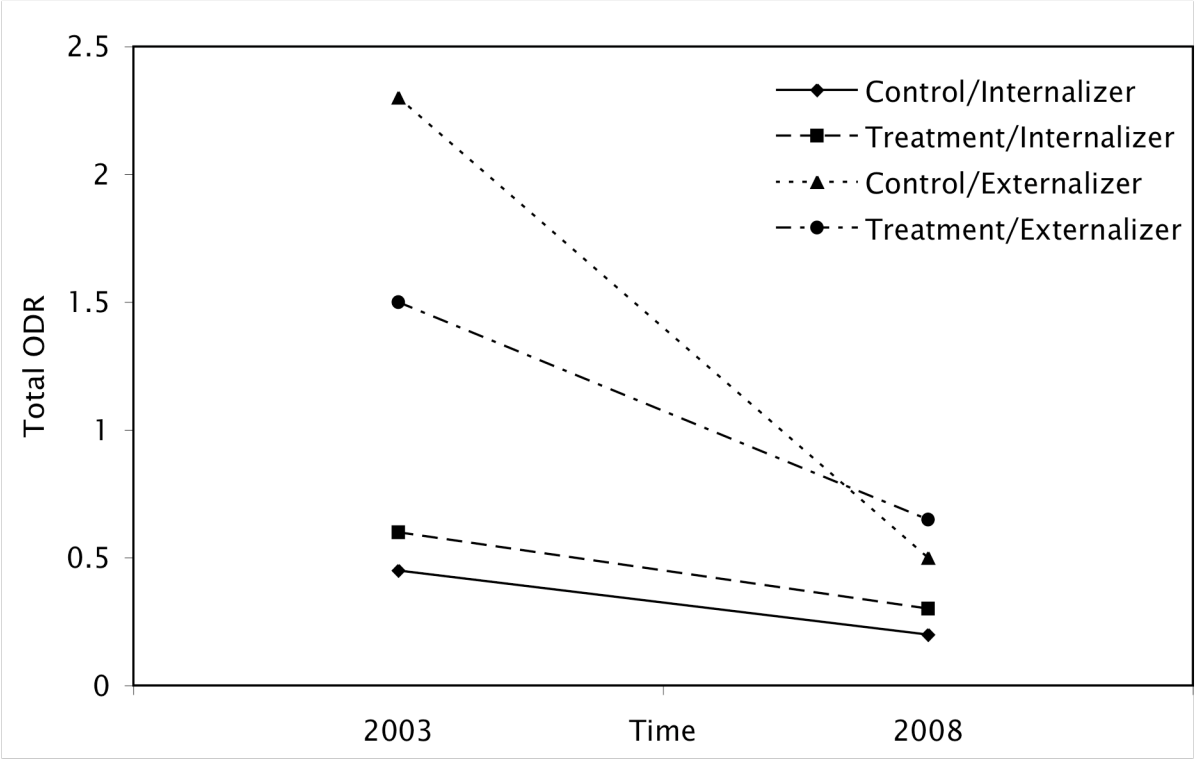


*Figure 19*. Differences in response to the intervention between internalizers and externalizers as measured by total ODR.

*Research question nineteen*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by total office discipline referrals (ODR) using absences as a covariate? If the intervention was effective, when compared to the control groups, both internalizer and externalizer groups receiving the intervention would demonstrate a decrease in ODR when compared to the control groups. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility

that they could affect the relationship between ODR and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less ODR

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in total ODR over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 20). The time x group interaction was significant ($F(3, 119) = 8.591$, $p < .05$). The main effect for time was significant ($F(1, 119) = 5.539$, $p < .05$). In addition, the main effect for group was also significant ($F(3, 119) = 4.456$, $p < .05$).

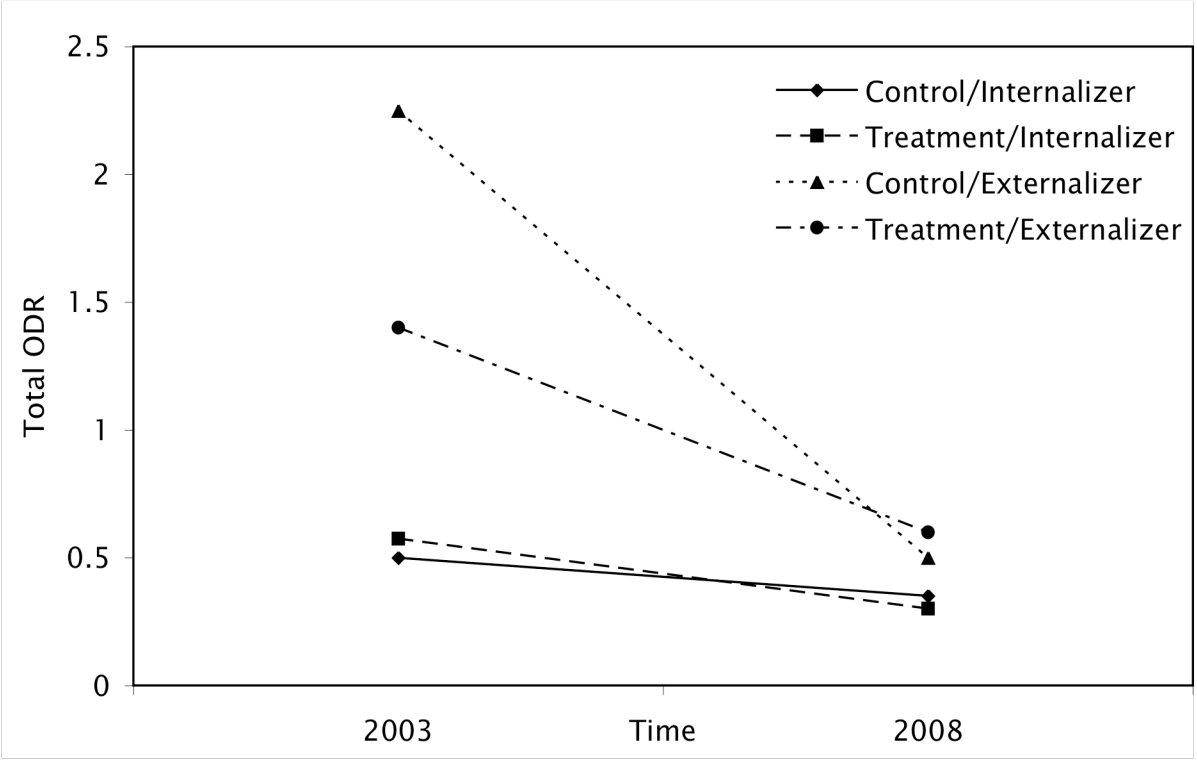


*Figure 20*. Differences in response to the intervention between internalizers and externalizers as measured by total ODR.

*Research question twenty*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by unexcused absences? If the intervention was effective, then both internalizer and externalizer groups would demonstrate a decrease in unexcused absences when compared to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in unexcused absences over time according to treatment/control group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 21). The time x group interaction was not significant ($F(3, 123) = .272$, $p > .05$). The main effect for time was not significant ($F(1, 123) = 3.598$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 123) = .703$, $p > .05$).

*Research question twenty-one*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by suspended absences? If the intervention was effective, then both internalizer and externalizer groups receiving the intervention would demonstrate a decrease in suspended absences when compared to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in suspended absences over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the

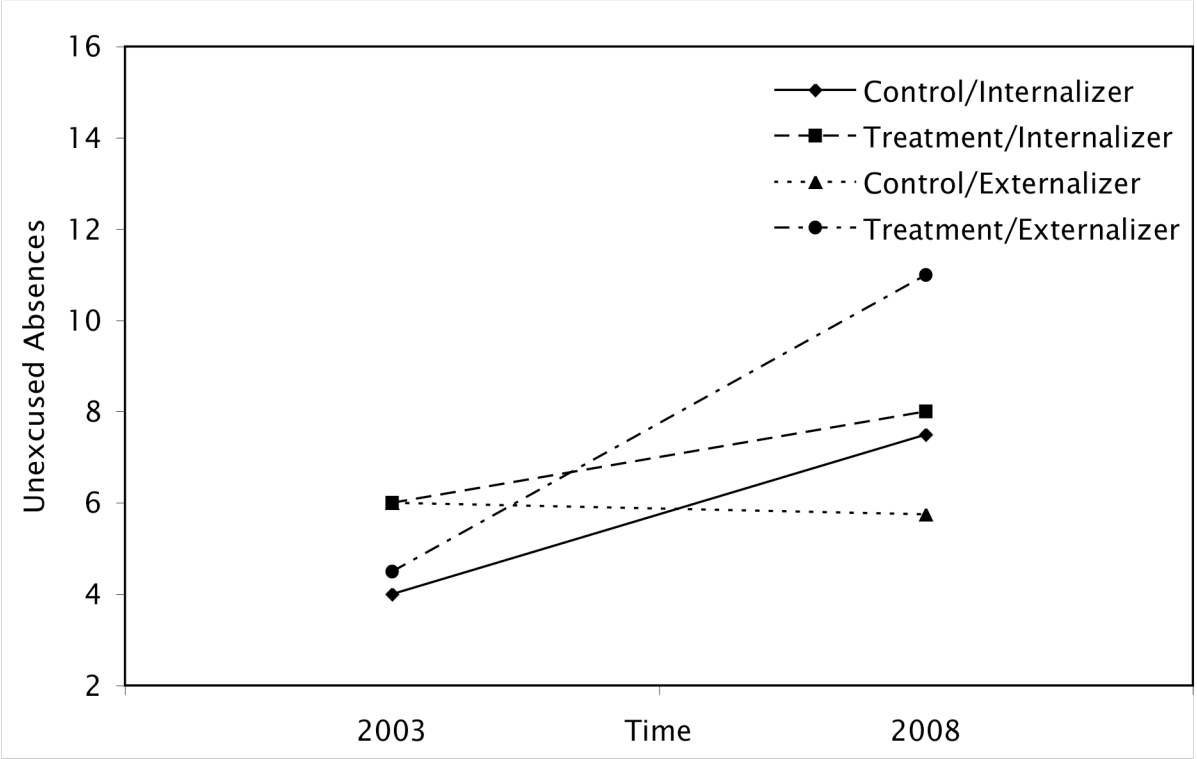


*Figure 21*. Differences in response to the intervention between internalizers and externalizers as measured by unexcused absences.

differential change over time (see Figure 21). The time x group interaction was significant ($F(3, 123) = 3.804$, $p < .05$). The main effect for time was not significant ($F(1, 12) = .078$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 109) = .884$, $p > .05$).

*Research question twenty-two*. Are there differences in the response to intervention between students identified as internalizers and externalizers as measured by tardies? If the intervention was effective, then both internalizer and externalizer groups would demonstrate a decrease in tardies when compared to the control groups.

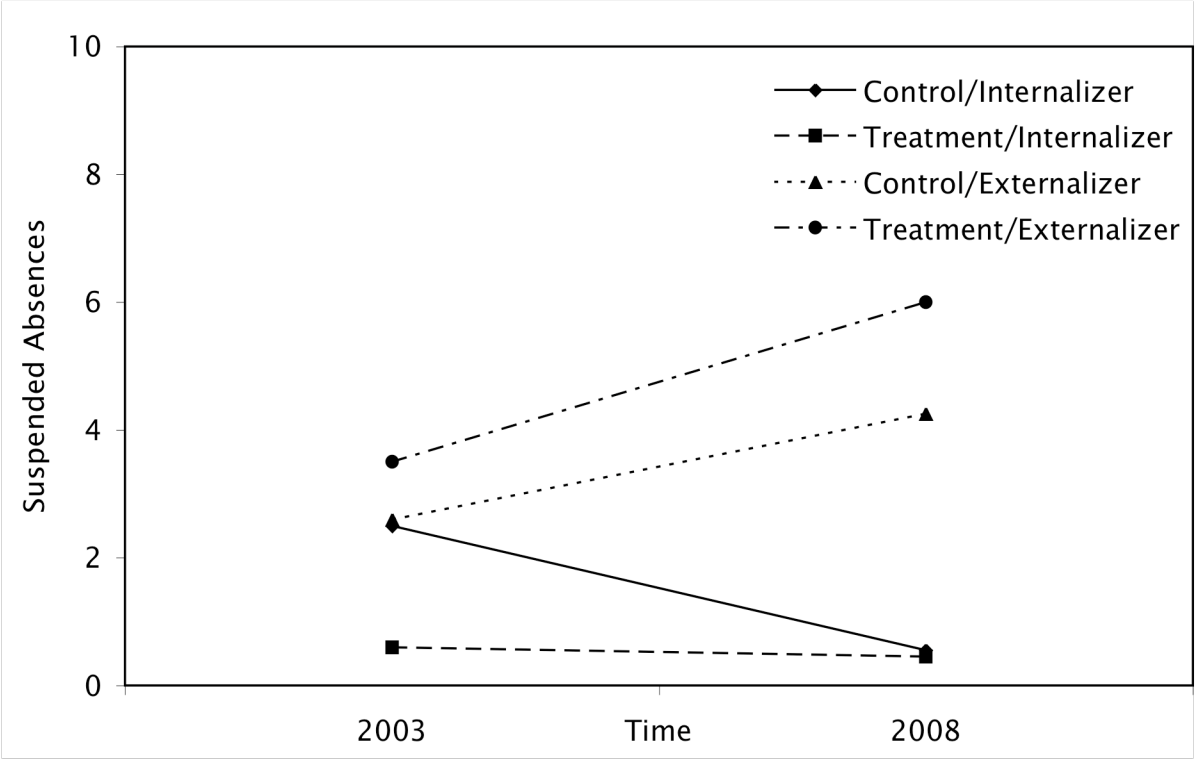


*Figure 22*. Differences in response to the intervention between internalizers and externalizers as measured by suspended absences.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in tardies over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 23). The time x group interaction was not significant ($F(3, 123) = 2.609$, $p > .05$). The main effect for time was not significant ($F(1, 123) = 1.498$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 123) = .356$, $p > .05$).

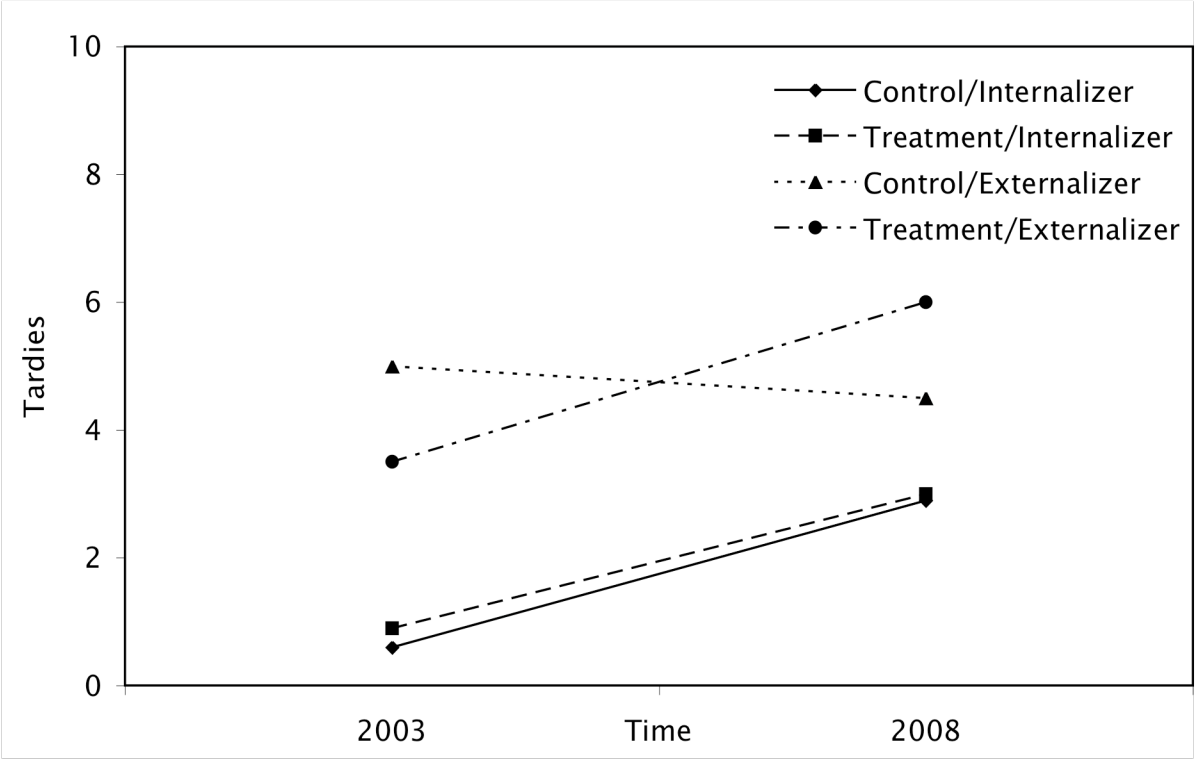


*Figure 23*. Differences in response to the intervention between internalizers and externalizers as measured by tardies.

*Research question twenty-three*. Are there differences in the response to intervention between students identified as internalizers and externalizers as measured by tardies using absences as a covariate? If the intervention was effective, when compared to the control groups, both internalizer and externalizer groups receiving the intervention would demonstrate a decrease in tardies when compared with the control groups. Suspended and unexcused absences were used as a covariate in order to eliminate the possibility that they could affect the relationship between tardies and the intervention. In other words, if the students are missing more school at time 2, then they are more likely to have less tardies.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in tardies over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 24). The time x group interaction was not significant ($F(3, 119) = 1.705$, $p > .05$). The main effect for time was not significant ($F(1, 119) = .004$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 119) = .168$, $p > .05$).

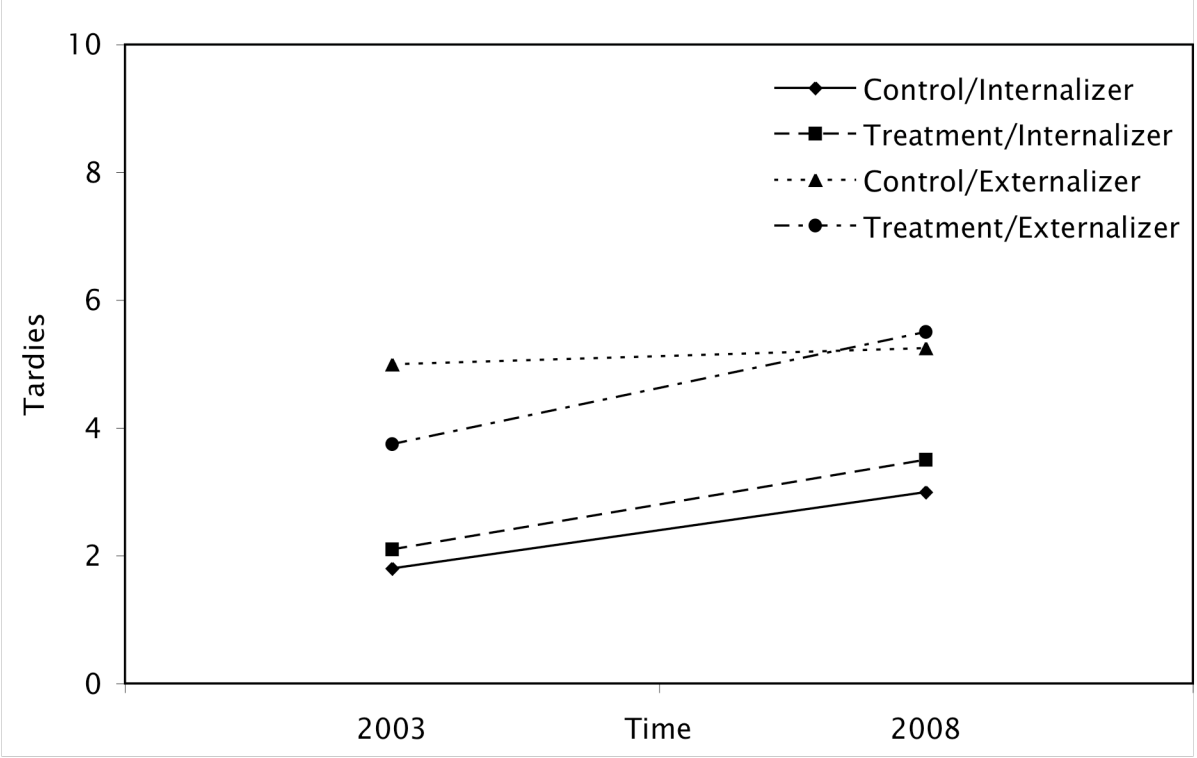


*Figure 24*. Differences in response to the intervention between internalizers and externalizers as measured by tardies.

*Research question twenty-four*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by TRF Internalizing scores? If the intervention was effective then internalizer and externalizer groups receiving the intervention should have a significant decrease in scores when compared to the control group.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Internalizing score over time according to treatment or control group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 25). The time x group interaction was not significant ($F(3, 12) = .270$, $p > .05$). The main effect for time was not significant ($F(1, 12) = .068$, $p > .05$). However, the main effect for group was significant ($F(3, 12) = 7.036$, $p < .05$).

*Research question twenty-five*. Are there any differences in the response to intervention between students identified as internalizers and externalizers as measured by TRF Externalizing scores? If the intervention was effective, participants in internalizer or externalizer groups receiving the intervention should have demonstrated a decrease in externalizing scores compared to the control groups.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Externalizing score over time according to treatment group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the

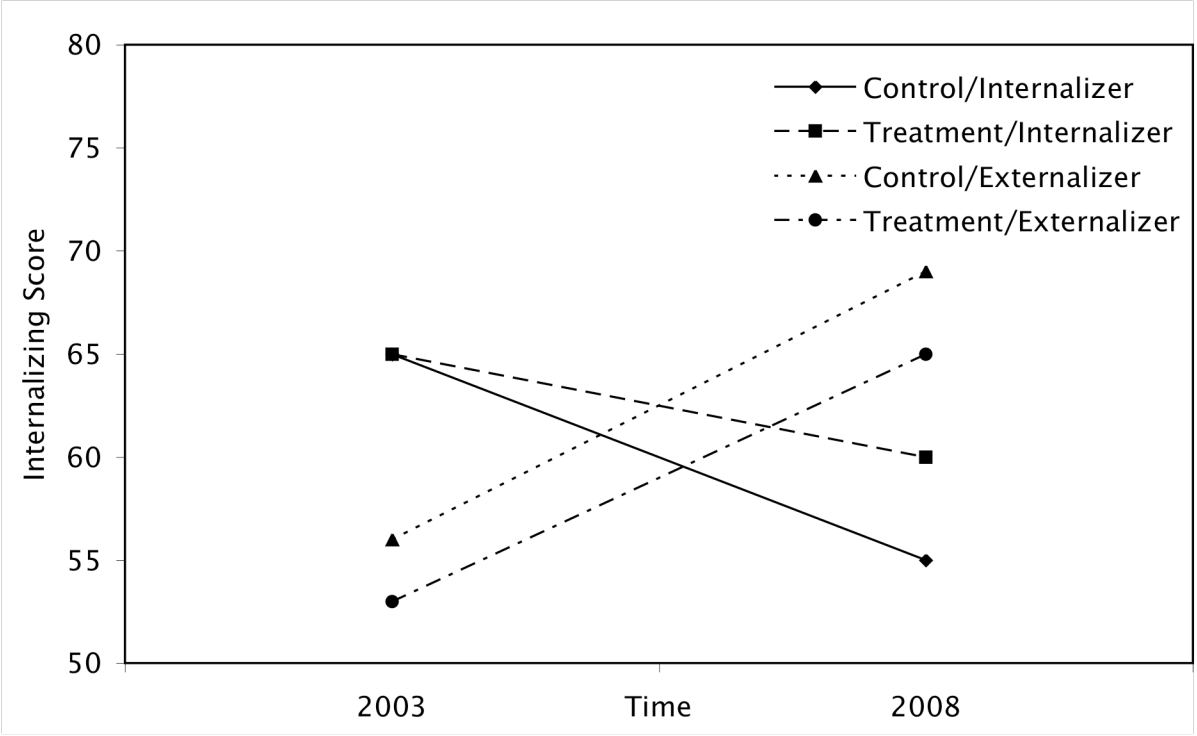


*Figure 25*. Differences in response to the intervention between internalizers and externalizers as measured by TRF Internalizing scores.

differential change over time (see Figure 26). The time x group interaction was not significant ($F(3, 12) = 1.656$, $p > .05$). The main effect for time was not significant ($F(1, 12) = 1.084$, $p > .05$). However, the main effect for group was significant ($F(3, 12) = 5.879$, $p < .05$).

*Research question twenty-six*. Are there differences in the response to intervention between students identified as internalizers and externalizers as measured by TRF Total Problem Behavior scores? If the intervention was effective, participants in the internalizer or externalizer treatment groups should have demonstrated a decrease in Problem Behavior scores when compared to the control groups.

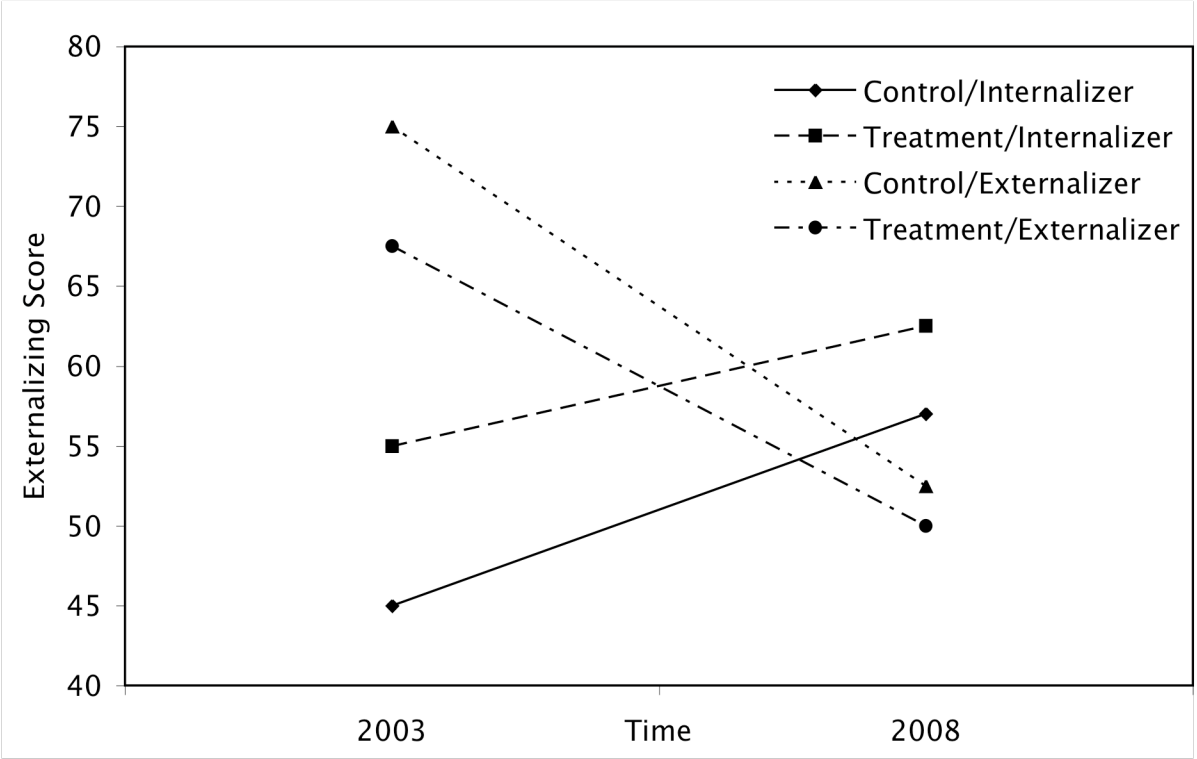


*Figure 26*. Differences in response to the intervention between internalizers and externalizers as measured by TRF Externalizing scores.

A 4 x 2 mixed design ANOVA was calculated to test whether there was differential change in the TRF Total Problem Behavior score over time according to treatment/control group membership. The groups were internalizers receiving no treatment (control 1), treatment internalizers, externalizers receiving no treatment (control 2), and treatment externalizers. There were two time periods, which were December 2003 and May 2008. The interaction between time and group assessed the differential change over time (see Figure 27). The time x group interaction was not significant ($F(3, 12) = 2.556$, $p > .05$). The main effect for time was not significant ($F(1, 12) = 3.338$, $p > .05$). In addition, the main effect for group was not significant ($F(3, 12) = 1.001$, $p > .05$).

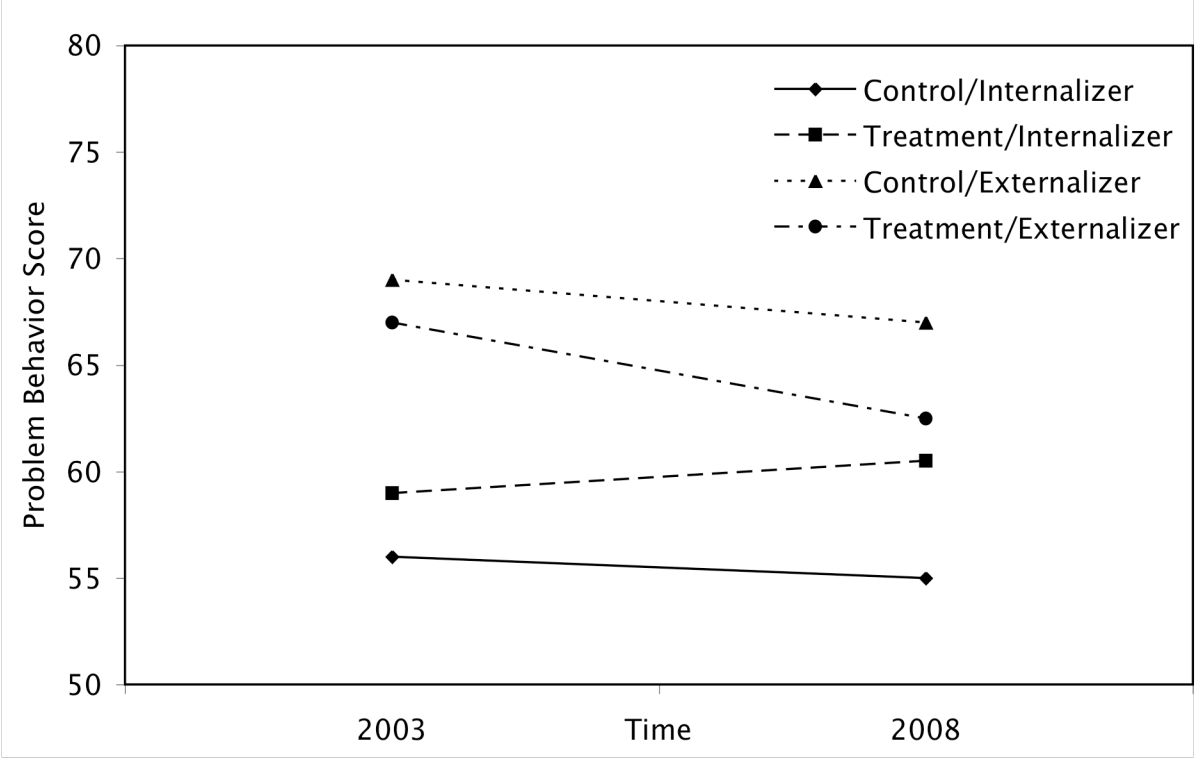


*Figure 27*. Differences in response to the intervention between internalizers and externalizers as measured by TRF Total Problem Behavior scores.

# DISCUSSION

The purpose of this study was to explore the long-term effects of a selective PBS curriculum that included components of social skills instruction, self-management strategies, and emotional awareness on students identified as at risk for emotional and behavior problems. The participants were categorized as either internalizers or externalizers and were assigned to one of four groups: control, one, two, or three school semesters of the intervention. Analyses were conducted using the split plot ANOVA resulting in terms for the main effect for group, main effect for time, and the interaction between group and time for each dependent variable. The objective of this study was two fold: (a) to determine what effects the intervention had on each group according to Grade Point Average (GPA), absences, Office discipline Referrals (ODR), tardies, and Auchenbach Teacher Rating Form (TRF) scores; (b) to determine whether there were any differences in responses between internalizers or externalizers in the control and treatment groups.

## *Response to Target Intervention*

According to the analysis of the first objective, there were no significant differences according to group. Although the study fails to demonstrate significant findings, it does show a constant, though statistically insignificant trend in improvements in most areas assessed for the group receiving one semester of the intervention. More specifically, the group receiving one semester of the intervention showed more improvements when compared to the other groups in the areas of GPA, disciplinary ODR, total ODR, tardies, and the TRF Problem behavior score. Although statistically insignificant, results also demonstrated that the group receiving three semesters of the intervention tended to have lower scores in all assessed areas when compared to the other three groups.

According to the analysis of the second objective, there were significant differences according to group. In the areas of disciplinary ODR and total ODR, the externalizing control group demonstrated a statistically significant improvement compared to the other groups. It is a possibility that this can be attributed to the fact that for these variables, and many of the others, the externalizing control group had worse initial scores compared to the other control group and the two treatment groups. There were also significant findings according to group as measured by TRF Internalizing and Externalizing scores. Both externalizer groups showed an increase in Internalizing scores while the internalizing groups demonstrated a decrease. In addition, both externalizer groups showed a decrease in Externalizing scores while the internalizing groups demonstrated an increase. These findings may suggest that the internalizing groups demonstrated less internalizing behaviors and more externalizing behaviors, while the externalizing groups demonstrated less externalizing behaviors and more internalizing behavior when their 2004 scores were compared to their 2008 scores.

This study suggests that participants receiving early interventions with components including social skills instruction, self-management strategies, and emotional awareness do not show statistically significant differences in their responses to the intervention over a five-year period. Students may respond to these interventions; however, the intervention may not produce long-term results. This may indicate that participants need the intervention over longer periods of time. It may also indicate that the groups were not comparable on all measures, with the possibility that the students receiving more of the intervention were more difficult than other groups so it was more challenging to demonstrate change for them. With the results showing that the group receiving one semester of the intervention demonstrated more of a response, it may be

most beneficial to serve students with multiple one semester interventions throughout the course of their schooling.

Previous research (Bergan & Kratochwill, 1990; Foorman et al., 1997; Forness et al., 2000; Kazdin, 1987; Walker et al., 1995) supports the need for early intervention with students at risk for EBD. The study applied early intervention principles in a middle school and junior high setting. The results of this study may imply that students at risk of EBD are in need of interventions prior to entering early adolescence. Bowman and Kauffman (2001) found that middle school students were identified as having behavior problems during elementary school years but the issues were not addressed with appropriate interventions until the misconduct became more severe (Forness et al.). It is possible that the students in this study also experienced a delay in application of appropriate interventions. A delay in intervening can become problematic and require more intensive and intrusive interventions (Bergan & Kratochwill, 1990; Foorman et al., 1997; Lane, 2002; O'Shaughnessy et al., 2002). It is possible that the participants' maladaptive behaviors were integrated into their repertoire, thus requiring more intense interventions than what were provided in this study.

*Impact of Findings on Future Practice*

This study contributes to the lack of longitudinal studies regarding early interventions with students with or at-risk for EBD. Although the findings did not reveal significant differences between students in the control and intervention groups, the study does show promising improvements in several areas for the group receiving one semester of the intervention. Because the treatment groups did not significantly differ from the control group, it may be concluded that students with or at risk for EBD may not demonstrate more severe behaviors if left untreated. These research findings contradict hypotheses that state that behaviors

increase in severity without adequate interventions (Lane, 2002) and will later require more intrusive interventions (Cartledge, 2005). However, it is possible that these interventions are effective but a higher dosage of the intervention is needed.

*Implications for Future Research*

The results of this study have the potential to guide practitioners in future research in this area. Findings from this research may support the idea of assigning participants to their groups using pretest scores in order to ensure equality among the groups. This study used random assignment, and in many cases, the participants varied at pretest scores.

Further research in appropriate measures for the effectiveness for early intervention would allow for a more accurate understanding of the effectiveness of early interventions including social skills instruction, self-monitoring, and social emotional awareness. This information would allow those implementing early interventions to better monitor the progress of the participants. It may also be beneficial to monitor the students after termination of the intervention and apply maintenance lessons to ensure long-term integration of the intervention components.

Measurements of treatment integrity of teachers implementing the intervention would also be helpful in creating consistency among treatment groups. Perhaps using the same teacher across all interventions would ensure that students in different are receiving the same quality of the intervention.

*Limitations*

Results of this study provide insights into the minimal longitudinal research regarding early interventions with students who are EBD. However, limitations of the study must be addressed. Threats to the validity of the study include the methods of gathering data on the

dependent measures. Data on the dependant variables were collected over the course of five years and each year the informants, i.e., teachers completing the TRF, changed. The Teacher Rating Forms (TRF), which was completed yearly across the course of five years was given to a different teacher each year. It is possible that because a different teacher completed the TRF in 2004 and 2008 it could have an effect on the results.

Changes in schedules from middle school or junior high to high school could have an impact on the results of this study. While students were enrolled in the middle school they attended seven periods throughout the day. However, high school schedules include only four periods a day. Therefore, students have more opportunities to be tardy in middle school or junior high. This change in scheduling also affects the attendance data. Attendance data was gathered using the marked absences for each period throughout the school year. While students were attending the high school, they had the opportunity to attend fewer periods when compared to the middle school or junior high.

However, for other variables such as attendance, ODR, etc. would not have been influenced by different raters. Although, students may have attended a variety of schools at the extended follow-up data point. Different school cultures and policies may have influenced how ODR, attendance, and other similar variables were measured.

The teachers who provided the intervention services also changed by group. Because the intervention seemed to be most effective for the two session group, there may have been something distinct about that group or that intervention process which was not identified that influenced the results. The teacher for the group receiving one semester of the intervention was not the same teacher who implemented the intervention for the groups receiving two or three

semesters of the intervention. It is also possible that some characteristic of this group contributed to the seemingly more positive outcomes.

Finally, positive outcomes may not be evident because the dependent variables (ODR, GPA, etc) were not well matched to the intervention. The intervention tended to focus on emotional resiliency, self-management and other components. Students may have improved in areas directly related to the intervention but which were not measured by the dependent variables. For example, GPA or ODR are not variables intended to capture change in emotional resiliency.

*Conclusion*

Although research indicates that students with or at risk of EBD respond to early interventions, this study was not able to demonstrate that treatment groups changed significantly when compared to a control group. Of the four groups (no treatment, one, two, or three semesters of the intervention), participants who received the least amount of the intervention (one semester) showed more positive outcomes across multiple areas. This study suggests that were no statistically significant long-term benefits for middle school or junior high students at risk of EBD receiving the selective PBS interventions.

# REFERENCES

Achenbach, T. M. & Rescorla, L. A. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington: University of Vermont, Research Center for Children, Youth, & Families.

Algoznine, B. & Kay, P. (Eds.). (2002). *A Handbook of Successful Prevention Strategies: Preventing Problem Behaviors*. Thousand Oaks, CA: Corwin Press.

Armstrong, K. H., Dedrick, R. F., & Greenbaum, P. E. (2003). Factors associated with community adjustment of youth adults with serious emotional disturbance: A longitudinal analysis. *Journal of Emotional and Behavioral Disorders, 11*, 66-76.

Auger, R. W. (2004). The accuracy of teacher reports in the identification of middle school students with depressive symptomatology. *Psychology In the Schools, 41*(3), 379-389.

Bambara, L. M., Mitchell-Kvacky, N. A., & Iacobelli, S. (1994). Positive behavioral support for students with severe disabilities: An emerging multicomponent approach for addressing challenging behaviors. *School Psychology Review, 23*(2), 263-278.

Beirman, K. & Welsh, J. A. (2000). Assessing social dysfunction: The contributions of laboratory and performance-based measures. *Journal of Clinical Child Psychology, 29*, 526-539.

Bergan, J. R. & Kratochwill, T. R. (1990). *Behavioral consultation and therapy*. New York, NY: Plenum Press.

Bowman, L. J. & Kauffman, J. (2001). *The early identification of middle school students with learning disabilities and emotional disturbances: Results of a retrospective analysis*. Paper presented at the 25th Annual Conference on Severe Behavior Disorders of Children and Youth.

Bullis, M. & Cheney, D. (1999). Vocational and transition interventions for adolescents and young adults with emotional or behavioral disorders. *Focus on Exceptional Children, 31*, 1-24.

Bullis, M., Bull, B., Johnson, P., & Johnson, B. (1994). Identifying and assessing the community-based social behaviors of adolescents and young adults with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 2*, 173-189.

Bullis, M., Nishioka-Evans, V., Fredericks, H. D., & Davis, C. (1993). Identifying and assessing the job-related social skills of adolescents and youth adults with emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 1*, 236-250.

Caldarella, P., Young, E. L., Richardson, M. J., Young, B. J., & Young, K. R. (2008). Validation of the Systematic Screening for Behavior Disorders in middle and junior high school. *Journal of Emotional and Behavioral Disorders, 16*, 105-117.

Carr, E. G, (1994). Emerging themes in the functional analysis of problem behavior. *Journal of Applied Behavior Analysis, 27*(2), 393-399.

Carr, E. G., Horner, R. H., Turnbull, A., Marquis, J. G., Magito, McLaughlin, D., et al. (1999). Positive behavior support for people with developmental disabilities. A research synthesis. American Association on Mental Retardation Monograph Series. Washington, DC: American Association on Mental Retardation.

Carter, E. W. & Webby, J. H. (2003). Job performance of transition age youth with emotional and behavioral disorders. *Exceptional Children, 69*, 449-465.

Cartledge, G. (2005). Learning disabilities and social skills: reflections. *Learning Disability Quarterly, 28*(2), 179-181.

Clarizio, H. F. (1994). Assessment of depression in children and adolescents by parents, teachers, and peers. In W.M. Reynolds & H.F. Johnson (Eds.), *Handbook of depression in children and adolescents* (pp. 235-248). New York: Plenum Press.

Cullinan, D. & Sabornie, E. J. (2004). Characteristics of emotional disturbance in middle school and high school students. *Journal of Emotional and Behavioral Disorders, 12*(3), 157-167.

DiGangi, S. A., Maag, J. W., & Rutherford, Jr., R. B. (1991). Self-graphing of on-task behavior: Enhancing the reactive effects of self-monitoring on on-task behavior and academic performance. *Learning Disability Quarterly, 14*(3), 221-230.

Eber, L. & Nelson, M. (1997). School-based wraparound planning: Integrating services for students with emotional and behavioral needs. *American Journal of Orthopsychiatry, 67*(3), 385-395.

Elksnin, L. K. & Elksnin, N. (2004). The social-emotional side of learning disabilities. *Learning Disabilities Quarterly, 27*(1), 3-8.

Elliott, S. N. & Busse, R. T. (1991). Social skills assessment and intervention with children and adolescents. *School Psychology International, 12,* 63-83.

Essenberg, N., Gunthrie, I. K., Murphy, B., Shepard, S., Cumberland, A., & Gustavo, C. (1999). Consistency and development of prosocial dispositions: A longitudinal study. *Child Development, 70*, 1360-1372.

Fantuzzo, J. & Atkins, M. (1992). Applied behavior analysis for educators: Teacher centered and classroom based. *Journal of Applied Behavior Analysis, 25*, 37-42.

Forness, S. R., Kavale, K. A., MacMillan, D. L., Asarnow, J. R., & Duncan, B. B. (1996). Early detection and prevention of emotional or behavioral disorders: Developmental aspects of systems care. *Behavioral Disorders, 21*(3), 226-240.

Forness, S. R., Serna, L. A., Nielsen, E., Lambros, K., Hale, M. J., & Kavale, K. A. (2000). A model for early detection and primary prevention of emotional or behavioral disorders. *Education and Treatment of Children, 23*(3), 325-345.

Frey, K. S., Nolen, S. B., Edstrom, L. V. S., & Hirschstein, M. K. (2005). Effects of a school-based social emotional competence program: Linking children's goals, attributions, and behavior. *Applied Developmental Psychology (26)*, 171-200.

Furlong, M. J., Morrison, G. M., & Dear, J. D. (1994). Addressing school violence as part of schools' educational mission. *Preventing School Failure, 37*(2), 5-10.

Greenbaum, P. E., Dedrick, R. F., Friedman, R. M., Kutash, K., Brown, E. C., Lardierh, S. P., et al. (1996). National Adolescent and Child Treatment Study (NCATS): Outcomes for children with serious emotional and behavioral disturbance. *Journal of Emotional and Behavioral Disorders, 4,* 130-146.

Greenberg, M.T., Weissberg, R. P., O'Brien, M.U., Zins, J.E., Fredericks, L., Resnik, H., et al. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist, Special Issue: Prevention that Works for Children and Youth, 58*, 466-474.

Gresham, F. M., (1982). Social skills for exceptional children. *Theory into Practice, 21*(2), 129-133.

Gunter, P. L., Jack, S. L., Depaepe, P., Reed, T. M., & Harrison, J. (1994). Effects of challenging behaviors of students with EBD on teacher instructional behavior. *Preventing School Failure, 38*(3), 35-39.

Hamre, B. K. & Pianta, R. C. (2005). Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure? *Child Development, 76*(5), 949-967.

Hill, L. G., Coie, J. D., Lochman, J. E., & Greenberg, M. T. (2004). Effectiveness of screening for externalizing problems: Issues of screening accuracy and utility. *Journal of Counseling and Clinical Psychology, 72*(5), 809-820.

Hill, J. W. & Coufal, K. L. (2005). Emotional/behavioral disorders: A retrospective examination of social skill. Linguistics, and student outcomes. *Communication Disorders Quarterly, 27*(1), 22-46.

Hoff, K. E. & DuPaul, G. J. (1998). Reducing disruptive behavior in general classrooms: The use of self-management strategies. *School Psychology Review, 27*(2), 290-303.

Kauffman, J. M. (1999) How we prevent the prevention of emotional and behavioral disorders. *Exceptional Children, 65*(4), 448-468.

Kauffman, J. M. (2001). *Characteristics of emotional and behavioral disorders of children and youth* (7th ed). Columbus, OH: Merrill.

Knoff, H. M. (2003). Character education vs. social skills training: Comparing constructs vs. behavior. *Communique´, 32*(3), 39-40.

Landrum & Tankersley (1999). Emotional and behavioral disorders in the new millennium: The future is now. *Behavioral Disorders, 24*(4), 319-330.

Lane, K. L. (2007). Identifying and supporting students at risk for emotional and behavioral disorders within multi-level models: Data driven approaches to conducting secondary interventions with academic emphasis. *Education and Treatment of Children, 30*(4), 135-164.

Lane, K. L., Carter, E. W., Pierson, M. R., & Glaeser, M. R. (2006). Academic, social, and behavioral characteristics of high school students with emotional disturbances or learning disabilities. *Journal of Emotional and Behavioral Disorders, 14*(2), 108-117.

Lane, K. L., Gresham, F. M., & O'Shaughnessy, T. E. (2002). Serving students with or at-risk for emotional and behavioral disorders: Future challenges. *Education and Treatment of Children, 25*(4), 507-521.

Lane, K. L., Wehby, J., & Barton-Arwood, S. M. (2005). Students with and at risk for emotional and behavioral disorders: Meeting their social and academic needs. *Preventing School Failure, 29*(2), 1-5.

Lewis, T. J. & Garrison-Harrell, L. (1999). Effective behavior support: Designing setting-specific interventions. *Effective School Practices, 17*(4), 38-46.

Lewis-Palmer, T., Sugai, G., & Larson, S. (1999). Using data to guide decisions about program implementation and effectivenss: An overview and applied example. *Effective School Practices, 17*(4), 47-53.

Luiselli, J. K., Putnam, R. F., Handler, M. W., & Feinberg, A. B. (2005). Whole-school positive behavior support: Effects on student discipline problems and academic performance. *Educational Psychology, 25*(2-3), 183-198.

Mace, F. C., Belfiore, P. J., & Hutchinson, J. M. (2001). Operant theory and research on self-regulation. In B. Zimmerman & D. Schunk (Eds.), *Learning and academic achievement: Theoretical perspectives*. (pp. 39-65). Mahwah, NJ: Lawrence Erlbaum.

Mathur, S. R. (2007). Understanding emotional and behavioral disorders: Are we paying the cost of borderline ethics? *Education and Treatment of Children, 30*(4), 11-26.

Mattison, R. E., Hooper, S. R., & Glassberg, L. A. (2002). Three-year course of learning disorders in special education students classified as behavioral disordered. *Journal of the American Academy of Child and Adolescent Psychiatry, 41,* 1454-1461.

Merrell, K. W., Juskelis, M. P., Tran, O. K., & Buchanan, R. (2008). Social and emotional learning in the classroom: Impact of Strong Kids and Strong Teens on students' social-emotional knowledge and symptoms. *Journal of Applied School Psychology, 24*(2), 209-224.

Meyer, L. H. & Evans, I. M. (1989). *Nonaversive intervention for behavior problems: A manual for home and community*. Baltimore: Paul H. Brooks.

Miller, J. S. & Cardy, R. L. (2000). Self-monitoring and performance appraisal: Rating outcomes in project teams. *Journal of Organizational Behavior, 21*, 609-626.

National Center for Education Statistics. (2007). *Supplemental notes*. Retrieved April 24, 2008 from http://nces.ed.gov/programs/coe/2007/supnotes/n08.asp

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

O'Shaughnessy, T. E., Lane, K. L., Gresham, F. M., & Beebe-Frankenberger, M. E. (2003). Children placed at risk for learning and behavioral difficulties. *Remedial and Special Education, 24*(1), 27-35.

Offord, D. R. & Bennett, K. J. (1994). Conduct disorder: Long-term outcomes and intervention effectiveness. *Journal of the American Academy of Child Adolescent Psychiatry, 33*(8), 1069-1078.

Prater, M. A. & Hogan, S. (1992). Using self-monitoring to improve on-task behavior and academic skills of an adolescent with mild handicaps across special and regular education settings. *Education & Treatment of Children, 15,* 43-56.

Prater, M. A., Joy, R., Chilman, B., Temple, J., & Miller, S. R. (1991). Self-monitoring of on-task behavior by adolescents with learning disabilities. *Learning Disability Quarterly, 14*, 164-177.

President's Commision on Excellence in Special Education. (2002). *A new era: Revitalizing special education for children and their families*. Retrieved July 15, 2002, from http://www.ed.gov/inits/commissionsboards/whspecialeducation/index.html.

Ragozzine, K., Resnik, H., O'Brien, M.U., & Weissberg, R. (2003). Promoting academinc achievement through social and emotional learning. *Educational Horizons, 81*(4), 169-171.

Reid, R., Trout, A. L., & Schartz, M. (2005). Self-regulation interventions for children with attention deficit/hyperactivity disorder. *Exceptional Children, 4*, 31-377.

Saborne, E. J., Kauffman, J. K., & Cullinan, D. A. (1990). Extended sociometric status of adolescents with mild handicaps: A cross-categorical perspective. *Exceptionality, 1,* 197-209.

Safran, S. P. & Oswald, K. O. (2003). Positive behavior supports: Can schools reshape disciplinary practices? *Exceptional Children, 69*(3), 361-373).

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition, & Personality, 9*, 185-211.

Scott, T. M., Nelson, C. M., Liaupsin, C. J., Jolivette, K., & Riney, M. (2002). Addressing the needs of at-risk and adjudicated youth through positive behavior support: Effective prevention practices. *Education and Treatment of Children, 25*(4), 532-551.

Severson, H. H., Walker, H. M., Hope-Doolittle, J., Kratochwill, T. R., & Gresham, F. M. (2007). Proactive, early screening to detect behaviorally at-risk students: Issues, approaches, emerging innovations, and professional practices. *Journal of School Psychology, 45,* 193-223.

Spence, S. H. (2003). Social skills training with children and young people: Theory, evidence, and practice. *Child and Adolescent Mental Health, 8*(2), 84-96.

Spence, S. H. & Donovan, C. (1998). Interpersonal problems. In Graham. Phillip Jeremy (ed,). *Cognitive behavior therapy for children and families* (pp. 217-245). New York: Cambridge University Press.

Sugai, G., Horner, R. H., Dunlap, G., Hieneman, M., Lewis, T. J., Nelson, C. M., et al. (1999). Applying positive behavioral support and functional behavioral assessment in schools. OSEP Center on Positive Behavioral Interventions and Support.

The University of Nottingham, School of Psychology (n.d.). *C82MST statistical methods 2 – lecture 8*. Retrieved on May 28, 2008 from www.psychology.nottingham. ac.uk/staff/pal/stats/C82MST/C82MST%20Lecture%208.pdf).

Trammel, D. L., Schloss, P. J., & Alper, S. (1994). Using self-recording, evaluation, and graphing to increase completion of homework assignments. *Journal of Learning Disabilities, 27*(2), 75-81.

Turnbull, A., Edmonson, H., Griggs, P., Wickham, D., Sailor, W., Freeman, R., et al. (2002). A blueprint for schoolwide positive behavior support. *Exceptional Children, 68*, 377-402.

United States Department of Health and Human Services. (1999). *Mental health: A report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health.

United States Department of Education Office of Special Education Programs. (2001). *Twenty-third annual report to congress on the implementation of the individuals with disabilities education act*. Washington DC: Author.

Utah State Board of Education (2008). *Special education rules*. Salt Lake City, UT: Harrington, Gray, & Arbogast.

Utah State Office of Education. (2003). *Utah State Board of Education special education rules*. Retrieved October 18, 2008, from http://www.schools.utah.gov/sars/lawsregs/pdfs/rules.pdf

Wagner, M., Kutash, K., Duchnowski, A. J, Epstein, M. H., & Sumi, W. C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. *Journal of Emotional and Behavioral Disorders, 13*(2), 79-96.

Walker, B., Cheney, D., Stage, S., & Blum, C. (2005). Schoolwide screening and positive behavior supports: Identifying and supporting students at risk for school failure. *Journal of Positive Behavior Interventions, 7*(4), 194-204).

Walker, H. M., Colvin, G., & Ramsey, E. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove: Brooks/Cole.

Walker, H. M., Nishioka, V. M., Zeller, R., Severson, H. H., & Feil, E. G. (2000). Causal factors and potential solutions for the persistent underidentification of students having emotional or behavioral disorders in the context of schooling. *Assessment for Effective Intervention, 26*(1), 29-39.

Walker, H. M., Ramsey, E., & Gresham, F. M. (2003). How early intervention can reduce defiant behavior – and win back teaching time. *American Educator*. Retrieved May 12, 2008, from http://www.aft.org/pubs-reports/american_educator/ winter03-04/index.html.

Walker, H. M., Ramsey, E., & Gresham, F. M. (2004). *Antisocial behavior in school: Evidence-based practices* (2nd ed.). Belmont, CA: Wadsworth.

Walker, H. M. & Severson, H. H. (1992). Systematic Screening for Behavior Disorders (SSBD): User's guide and administration manual. Longmont, CO: Sopris West.

Walker, H. M. & Severson, H. (1994). Replication of the Systematic Screening for Behavior Disorders (SSBD) procedure for the identification of at-risk children. *Journal of Emotional and Behavioral Disorders, 2*, 66-77.

Wagner, M., Kutash, K., Duchinowski, A. J., Epstein, M. H., & Sumi, W. C. (2005). The children and youth we serve: A national picture of the characteristics of students with emotional disturbances receiving special education. *Journal of Emotional and Behavioral Disorders, 13*(2), 79-96.

Weissberg, R. P. & O'Brien, M. U. (2004). What works in school-based social and emotional learning programs for positive youth development. *Annals of the American Academy of Political and Social Science, 591*, Positive Development: Realizing the Potential of Younth. 86-97.

Wentzel, K. & Wigfield, A. (1998). Academic and social motivational influences on students' academic performance. *Educational Psychology Review, 10*, 155-175.

Wentzel, K. R. (1996). Social goals and social relationship as motivators of school adjustment. In J. Juvenon, & K. R. Wentzel (eds.). *Social motivation: Understanding children's social adjustment* (226-247). New York: Cambridge University Press.

Wentzel, K. R. & Erdley, C. A. (1993). Strategies for making friends: Relations to social behavior and peer acceptance in early adolescence. *Developmental Psychology, 29*, 819-826.

Wilson, D. B., Gottfredson, D. C., & Najaka, S. S. (2001). School-based prevention of problem behaviors: A meta-analysis. *Journal of Quantitative Criminology, 17*(3), 247-272.

Young, K. R., West, R. P., Li, L., & Peterson, L. (1997). Teaching self-management skills to students with learning and behavior problems. *Reclaiming Children and Youth, 6*(2), 90-96.