

University of Mississippi

eGrove

---

Electronic Theses and Dissertations

Graduate School

---

2012

## An Examination of the Relationship Between an Autism Label and Teachers' Attitudes, Expectations, and Behavioral Intentions

Corinn Nicole Johnson

Follow this and additional works at: <https://egrove.olemiss.edu/etd>



Part of the [Psychology Commons](#)

---

### Recommended Citation

Johnson, Corinn Nicole, "An Examination of the Relationship Between an Autism Label and Teachers' Attitudes, Expectations, and Behavioral Intentions" (2012). *Electronic Theses and Dissertations*. 155. <https://egrove.olemiss.edu/etd/155>

This Dissertation is brought to you for free and open access by the Graduate School at eGrove. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of eGrove. For more information, please contact [egrove@olemiss.edu](mailto:egrove@olemiss.edu).

AN EXAMINATION OF THE RELATIONSHIP BETWEEN AN AUTISM LABEL AND  
TEACHERS' ATTITUDES, EXPECTATIONS, AND BEHAVIORAL INTENTIONS

A Thesis presented in partial fulfillment of requirements for the degree of Master of Arts Degree  
The University of Mississippi

By

CORINN N. JOHNSON

August 2011

Copyright Corinn N. Johnson 2011

ALL RIGHTS RESERVED

## ABSTRACT

The number of children with autism receiving instruction in the regular education (inclusion) setting has been increasing. Instructional time in inclusion classrooms may offer benefits to children with disabilities; this appears to especially be the case when teachers utilize effective strategies. Prior studies indicate that teachers' attitudes towards children with disabilities are important in their willingness to use such strategies. Unfortunately, a number of findings indicate certain kinds of disabilities, as well as the use of diagnostic labels, may negatively influence teachers' attitudes and behavior toward inclusion. The current study examined the impact of an autism spectrum disorder (ASD) label on the attitudes and behavioral intentions of 97 elementary and middle school teachers. Participants were exposed to a vignette of a child displaying social and behavioral difficulties. The child was described as displaying ASD, attention-deficit hyperactivity disorder, educable mental retardation, or no diagnosis provided. Participants completed measures of inclusion attitudes, expectations, and behavioral intentions. Inconsistent with a number of studies, diagnostic labels were not found to be related to teachers' ratings. Similarly, trainings on disabilities, courses in inclusion, and familiarity with children with disabilities were found to have no relationship with teachers' expectations and attitudes. Teachers with less experience and higher self-efficacy predicted more positive attitudes and higher student performance expectations. Implications for these findings are discussed.

## DEDICATION

This thesis is dedicated to my family. Thank you for always supporting, motivating, praying for, believing in, and loving me. This manuscript is for you.

## ACKNOWLEDGEMENTS

I do not even know where to begin to express my gratitude for my network of support, without which this thesis would have not been a reality. I would like to express my gratitude to my advisor, Alan Gross, for his patience, encouragement, and assistance throughout this project.

This project would not have been possible without the knowledge and guidance of my thesis committee members, Kelly Wilson and John Young. I would like to thank my friends and family for always being there, even when I was not the most pleasant to be around. I would also like to acknowledge the Clarksdale Municipal School District for working on this research project with me. Thank you, to the countless others who lent me a helping hand, a listening ear, or additional brainpower when it was needed.

## TABLE OF CONTENTS

TITLE PAGE.....	1
ABSTRACT.....	ii
INTRODUCTION.....	1
<i>Changes in Classroom Composition- Autism</i> .....	2
<i>Inclusion</i> .....	6
<i>Attitudes</i> .....	11
<i>Labeling</i> .....	12
METHOD.....	16
<i>Participants</i> .....	16
<i>Measures</i> .....	16
<i>Stimulus Materials</i> .....	19
<i>Procedures</i> .....	20
RESULTS.....	21
<i>Data Cleaning and Preliminary Analysis</i> .....	21
<i>Influence of Label on Attitudes and Behavioral Intentions</i> .....	22
<i>Supplemental Analyses</i> .....	22
DISCUSSION.....	26
<i>Limitations and Future Directions</i> .....	27
REFERENCES.....	29
LIST OF APPENDICES.....	37
Appendix: A.....	38
Appendix: B.....	41
Appendix: C.....	44
Appendix: D.....	46

Appendix: E .....	48
Appendix: F .....	51
Appendix: G .....	53
VITA.....	55



## LIST OF TABLES

Table 1: Descriptive Statistics for Key Variables.....	21
Table 2: Bivariate Relationships among Demographic Variables.....	23
Table 3: Correlations among Key Variables.....	23
Table 4: Summary of Multiple Regression Analysis for Expectations of Future Progress.....	24
Table 5: Summary of Multiple Regression Analysis for Beliefs Regarding Inclusion.....	25
Table 6: Summary of Multiple Regression Analysis for Affective Responses to Inclusion.....	25

## INTRODUCTION

Since 1975, the Education of All Handicapped Children's Act (Public Law 94-142), revised in 1990 and renamed the Individuals with Disabilities Education Act (IDEA), students with disabilities have been guaranteed the same educational opportunities as their non-disabled peers. This legislation mandated that all children in the United States be guaranteed a free and appropriate public education. IDEA was modified in 1997 to include that children with disabilities should be taught in their least restrictive environment (LRE), in regular education classrooms (also referred to as inclusion) whenever possible.

As of 1999, the number of students, ages six years to twenty-one years, served under IDEA was increasing at rates higher than general population rates, and rates of school enrollment (U.S. Department of Education, 1999). According to the U.S. Department of Education (2005), between 1993 and 2003 the percentage of people in that age group receiving special education (SPED) services increased from 8.1% to 9.1% of the general population. In 1993, 4.8 million were receiving SPED services; in 2003 the number had increased to over 6 million.

Compliance with IDEA has led to increasing numbers of children with disabilities being educated with their typical peers. Recent statistics indicate that approximately 50% of children with special needs, ages 6 to 21 years, spend the majority of their day in regular education classrooms, also known as inclusion classrooms (U.S. Department of Education, 2005). As a result, many regular education teachers are finding themselves responsible for educating children with various diagnostic labels, varying education levels, and with ranges of behavioral concerns (Robertson, Chamberlain, & Kasari, 2003).

Research indicates that teachers' utilization of inclusion strategies is beneficial for children with disabilities. Data also suggest that teacher attitudes toward inclusion may affect the impact of inclusion strategies on child educational outcomes (U.S. Department of Education, 1999; Bender, Vail, & Scott, 1995). That is, regular education teachers' classroom behavior may be influenced by certain kinds of disabilities or classroom behaviors performed by students with special needs (Levins, Bornholt, & Lennon, 2005; Hastings & Oakford, 2003). The purpose of this work was to examine the impact of a disability label on teachers' perceptions, educational expectations, and behavioral intentions for a special needs child. Following a discussion of the impact of IDEA on regular education classroom composition, the impact of mainstreaming on academic outcomes will be examined. Teacher attitudes and expectations towards mainstreaming and children with various disabilities will also be discussed.

#### *Changes in Classroom Composition- Autism*

Over the past decade the number of students receiving special education and related services under IDEA increased by more than one million. The percentages of individuals served within most categories remained fairly consistent over that time period. Increases have occurred in the percentages of children receiving services for specific learning disabilities, other health impairment, developmental delay, and autism (U.S. Department of Education, 2005).

Autism was first added as a disability when IDEA Amendments occurred in 1990. Out of all students, ages 6 to 21 years, receiving SPED services in 1993, .37% received services for autism. In 2003, this number increased to 2.3% (U.S. Department of Education, 2005). For the purpose of SPED classifications, the category of 'autism' includes other pervasive developmental disorders, sometimes also referred to as autism spectrum disorders (ASD)

(Williams & Eaves, 2005). However, autistic disorder is the most common of the autism spectrum disorders found in the school system (Williams & Eaves, 2005).

The 'autism spectrum' is a term that involves a group of developmental disabilities that are usually initially diagnosed in infancy, childhood, or adolescence. These disabilities include autistic disorder (autism); Rett's Disorder; Childhood Disintegrative Disorder; Asperger's Disorder; and Pervasive Developmental Disorder, Not Otherwise Specified (PDD- NOS). All of these disabilities are considered to represent a spectrum since these diagnoses share a number of symptom requirements. The number and severity of symptoms range across these diagnoses/disabilities. A diagnosis of any of the ASDs requires: impairments in social interaction and communication; repetitive behaviors, interests, and activities; and onset occurring prior to three years of age. The disorders can occur with other physical, psychological, or psychiatric conditions (American Psychiatric Association, 2000; Wing, 1997).

As previously stated, the percentage of individuals with ASDs receiving special education assistance has been on the rise for several years. This trend will likely continue. The Center for Disease Control (2007) performed a population-based study to determine the prevalence of ASDs (including autism, PDD-NOS, and Asperger's Disorder) among children in the U.S. ages 8-14 years old. In comparison to 1979, when it was estimated that two in 10,000 youngsters met criteria for ASD, results of this study suggest that approximately 1 in 150 children have an ASD. Results of this study indicated that, nationwide, around 45% of individuals with ASDs had significant cognitive impairment (IQs that were less than or equal to 70). Other studies have also concluded that approximately 40-50% of individuals with ASDs have an intellectual disability (Croen, Grenther, Hoogstrate, & Selvin, 2002; Edelson, 2006).

Evidence suggests that individuals diagnosed with an ASD who do not display intellectual difficulties frequently need disability services as a result of other deficits. The majority of children with ASDs receive special services daily (White, Scahill, Klin, Koenig & Volkmar, 2007; Yianni- Coudurier et al. 2008; U.S. Department of Education, 2005). These services entail special education teachers or other specialists (such as Speech Language pathologists) utilizing intervention techniques to address the child's academic and behavioral difficulties in order to prepare for, and facilitate the child's ability to function effectively when in regular education classroom settings (Casella & Colella, 2004; Lovaas, 1987). Such deficits, as well as behaviors commonly exhibited by individuals with ASDs, may interfere with educational attainment in the classroom.

Communication difficulties, impairments in social interaction, and stereotypical/repetitive behaviors occur in all of ASDs. Attention deficits, hyperactivity, maladaptive or oppositional/defiant behaviors, receptive and expressive language problems, tics similar to or indicative of Tourette's Disorder, and Obsessive Compulsive Disorder (OCD) symptoms are common in individuals with ASDs (Jordan, 2005; Robertson et al., 2003). These behavioral deficits tend to be more pronounced in individuals with 'classic' forms of autism in comparison to individuals with high functioning autism (HFA; when the individual has autism and an IQ  $\geq$  70) or other ASDs such as Asperger's and some forms of PDD-NOS (Bishop, Luyster, Richler, & Lord, 2008).

White et al. (2007) examined autism symptoms and other characteristics of individuals with ASDs and their relation to educational placement (i.e. least to most restrictive educational environment). Participants included school-age individuals with Asperger's, PDD-NOS, or HFA (high functioning autism). All participants had IQ scores above 70. Participants' adaptive

(communication, daily living skills, and socialization) test scores, cognitive ability (IQ scores), two tests measuring characteristics of ASDs, and educational history were compared. Results indicated that children with diagnoses of autism were more likely than children with Asperger's or PDD-NOS to be educated in special education classrooms. However, cognitive ability was more indicative of placement than diagnostic label: children with diagnoses of autism had lower IQ's than those with PDD-NOS and Asperger's, respectively. Additionally, when comparing students who began and remained in regular or special education classrooms with students who changed from one type of setting to another, students who began and remained in inclusion had higher cognitive ability (IQ scores at or above 105), better overall communication, and had less autistic communication impairment (i.e. echolalia). Students who began in inclusion and moved to special education, compared to those who remained in inclusion, were observed to have no difference in cognitive or adaptive scores. However, those who moved to the more restrictive environment had greater social deficits (ASD symptom severity). Interestingly, students who started in special education and remained in special education, compared to students that moved from special education to regular education classrooms, had higher scores on overall socialization (White et al., 2007).

Yianni-Coudurier et al. (2008) examined ASD characteristics and time spent in a specialized education setting versus a regular education setting. Children, ages three to five years, were assessed using autism behavior rating scales (Childhood Autism Rating Scale; CARS), behavioral problems scales (Aberrant Behavior Checklist), adaptive scales (Vineland Adaptive Behavior Scale), and a clinical evaluation of the severity of symptoms. It was reported that the amount of time a student with an ASD spent in an inclusion classroom increased as daily living skills and social skills increased. Students with ASDs who had more severe autistic

symptoms, engaged in more challenging behaviors, and who had parents from lower socio-professional categories were most likely to be placed in self-contained classroom environments. The authors noted that as scores on the CARS increased and or stereotypical/self-injurious behaviors increased, time in the special education environment increased. Since autism includes more severe behavioral problems, it is not surprising that children with HFA, Asperger's, and some forms of PDD-NOS are more likely to be in an inclusion setting.

### *Inclusion*

According to the U.S. Department of Education (2005), in 2003, over 33% of students with disabilities ages 3 to 5 received all of their education and special services in a setting with typical peers. Statistics also indicate that approximately 50% of the students with disabilities, ages 6 to 21 years, received most of their education in the regular education setting with typical peers (U.S. Department of Education, 2005). Despite the increasing proportion of students with disabilities in the inclusion setting, data concerning the benefits of inclusion on academics is inconsistent. For students with disabilities in the regular education classroom compared to students in self-contained classroom, some studies indicate higher grades and standardized test scores while other studies find little to no difference (Salend & Garrick-Duhaney, 1999; Freeman & Alkin, 2000; Carlberg & Kavale, 1980).

Rea, McLaughlin, and Walther-Thomas (2002) examined the educational environments of students with Learning Disabilities (LD) and their relationship to academic performance, challenging behavior, and attendance. When compared to students in a self-contained classroom, children in inclusion environments obtained higher grades in language arts, mathematics, science, and social studies. Analyses also indicated that for LD students, experiencing inclusion environments was associated with higher scores on standardized measures of language and math.

Additionally, compared to children in self-contained classroom environments, children in inclusion classrooms missed significantly fewer days of school. No differences were found for standardized test scores in reading comprehension, science, or social studies, nor were there differences in suspension rates (Rea et al., 2002).

Daniel and King (1997) randomly assigned students with disabilities (i.e. intellectual disability, learning disability, etc.) to self-contained and inclusion classrooms. Measures of academic performance, behavior problems, and self-esteem were obtained. For students in the third grade, gains in reading achievement, increased behavior problems, and lower self-esteem were found for students in inclusion compared to students in self-contained classrooms. However, for students in the fourth grade, students in inclusion did poorer in math and had lower self-esteem than their counterparts in self-contained settings. The authors suggested that academic gains couldn't be viewed as advantages of inclusion because of inconsistent findings seen in this and other similar studies.

Cole and Meyer (1991) examined academic and social benefits of an inclusion setting. For two years the authors compared the educational outcomes of students with severe or profound intellectual disability in inclusion settings to students in self-contained settings. They hypothesized that relative to students in an inclusive setting, students in self-contained classes would receive more services and progress at a higher rate in motor, self-help, speech and communication, and adaptive skills. Analysis indicated that in comparison to self-contained students, students in inclusion spent significantly more time in the community, with teacher's assistants, and with peers with or without disabilities. Consistent with hypotheses, students in self-contained classrooms spent more time with therapists, but they also spent more time alone than students in inclusion. Contrary to expectations, no differences were found in the amount of



student/teacher time or in any intellectual area (self-help, motor, communication, or adaptive). Observations of the students' interactions revealed that relative to self-contained setting students, students in the inclusion setting displayed higher social competence levels. Students in the inclusion setting had higher scores on initiating contact, accepting assistance, and indicating preferences than students in the self-contained setting. The authors suggested that the inclusion classroom enhanced social competence since students with disabilities were around typical peers and in the community more than their peers in the self-contained setting. They argued that because students with intellectual disabilities have a hard time generalizing, the ability to practice skills in multiple settings was likely beneficial.

Research has also examined the impact of inclusion for children with ASDs. Because of the language and social deficits children with ASDs possess, much of the research on inclusion has focused on examining the impact of these environments on social development. Harris et al. (1990) compared preschool age children with autism in a self-contained classroom to children with autism in an inclusion classroom. Children were assessed for language development and developmental age at the initial time of classroom placement, and 5-11 months later. Students with autism in the inclusion setting made progress in language nearing statistical significance. Additionally, while all children made developmental gains upon completion of the preschool program, only children in the inclusion classroom, both the typical students and the students with autism, made significant gains on developmental indicators.

Boutot and Bryant (2005) compared social characteristics in children with ASDs to children without ASDs in an inclusion setting. Participants in the study were second to fifth grade students who had a disability common in the inclusion setting (LD, behavior disturbance, or ADHD), had autism and were in the regular education classes for greater than fifty percent of

the day, or did not have a disability. Students were administered scales of social preference, social impact (how well the peers knew each other), and social networks (if they had friends in different peer groups). Results indicated that students with autism in inclusion classrooms were as likely as their typical peers to be chosen for activities, be noticed by other students in the classroom, and have a social peer group. The authors concluded that despite displaying behaviors that were different from their peers, students with autism in an inclusion setting were as socially involved as their typical peers.

While the data on academic correlates of inclusion are somewhat ambiguous, the above review indicates that instructional time in inclusion classrooms offers significant social and developmental benefits to children with disabilities. However, the U.S. Department of Education (1999) has noted that exposure to accessory instructional materials and teachers' use of effective inclusion instructional strategies are important factors affecting the success of children with disabilities in regular education classrooms. Additionally, it has been suggested that children with disabilities benefit socially from being served in the regular education classroom, and that these benefits are enhanced when regular education teachers use techniques that encourage social interactions among children with and without disabilities.

Peer tutoring or peer instruction is an example of an inclusion strategy that encompasses social factors (Dupaul, Ervin, Hook, & McGoey, 1998; Kamps, Barbeta, Leonard, & Delquadri, 1994; Odom & Watts, 1991). With peer tutoring, students are paired to learn by reviewing concepts. Oftentimes, a high achieving student is paired with a low achieving student. Another inclusion strategy that benefits children with various disabilities is behavior modification (Gresham, Watson, and Skinner, 2001, and DuPaul & Ervin, 1996). Generally, behavior modification strategies involve reinforcing desirable behaviors (e.g. praise, rewards, etc.) in an

effort to increase them while simultaneously decreasing undesirable or challenging behaviors through punishment or ignoring. Meta- analyses also reveal mnemonic strategies, reading-comprehension strategies, computer-assisted instruction, and word recognition strategies to be affective teaching strategies for students with various disabilities (Forness, 2001).

Kamps et al. (1994) studied possible benefits of classwide peer tutoring (CWPT) on students' reading skills and social interaction. Students included children with diagnoses of high functioning autism and their typical peers in regular education classroom settings. All children in the participating classrooms were trained in CWPT. Students in this study were to read passages with, provide feedback to, and correct partner-reading errors. Pre and post observations were made regarding students' reading comprehension, accuracy in word reading, and frequency and duration of social interactions during free time in class. It was observed that the majority of all of the students, both those with and without autism, experienced an increase in the reading fluency, reading comprehension, and the duration of social interaction time (Kamps).

Lovaas (1987) examined outcomes for children who received differing amounts of discrete trial training, a form of educational behavior modification. Children receiving treatment had diagnoses of autism. Children were randomly assigned to one of two treatments; the intensive therapy group received over forty hours weekly of discrete trial training, the other group of children received 10 hours or less of discrete trial training each week. In all cases, therapists were assigned to a child and worked with the child for at least two years. Results indicated significantly higher educational placements and higher IQ score gains for the children receiving intensive treatment. Forty-seven percent of the children receiving intensive treatment in comparison to two percent of the minimal treatment group of children qualified for enrollment in a typical first grade classroom. Post intervention assessment revealed the average IQ for the

intensive treatment group was significantly higher (30 points) than the average IQ score for the minimal treatment group. These gains were maintained at follow-up (Lovaas).

### *Attitudes*

The above review suggests that children are most likely to benefit from inclusion when teachers utilize a variety of specialized teaching technologies. Bender et al. (1995) have suggested that teachers' attitudes toward mainstreaming may affect teachers' utilization of mainstreaming strategies. Bender et al. administered measures of attitudes toward mainstreaming, utilization of instructional strategy modifications, and individual teacher demographics to a sample of first through eighth grade general education teachers. Teachers reported using various individualized teaching strategies including providing alternative-testing options and varying the instructional level based on child developmental level. Analyses revealed that regardless of individual teacher characteristics (e.g. number of years teaching or experience teaching children with disabilities), teachers were more likely to utilize effective mainstreaming instructional strategies and tailor their instructional strategy to accommodate the various ability levels of the children when they held more positive attitudes toward inclusion (e.g. believed that inclusion leads to good outcomes, inclusion has been successful in the schools and/or supported inclusion).

Levins et al. (2005) examined teachers' attitudes towards children with different disabilities, how those attitudes related to teaching intentions toward the child, and the relationship between teachers' attitudes towards disabilities and their personal teaching experience. Teachers were administered a demographic questionnaire; measures of attitudes towards children with a social disability, physical disability, and a cognitive disability; and a questionnaire measuring behavioral teaching intentions (how likely they would execute certain

behaviors) towards children with special education needs. It was observed that teachers' attitudes were most positive towards children with cognitive disabilities, then towards children with physical disabilities. Children with social disabilities elicited the most negative attitudes from teachers. Additionally, results illustrated that the more positive the attitudes towards children with disabilities, the greater the likelihood of teachers reporting intentions to include children with special needs in activities both inside and outside of the classroom. Negative attitudes were related to fewer attempts to gain experience with, as well as intentions to avoid interactions with children with special needs. Teachers' personal experiences with a child with a disability were not related to teachers' attitudes.

Hastings and Oakford (2003) examined student teachers' attitudes towards mainstreaming. Student teachers served as participants in order to control for the possible effects of teaching experience. Participants were asked to complete questionnaires assessing their attitudes concerning mainstreaming a child with either emotional/behavioral problems or an intellectual disability into their inclusion classroom. It was reported that participants were more accepting of mainstreaming a child with intellectual disabilities than a child with emotional and/or behavior problems (Hastings & Oakford).

### *Labeling*

In order for children with special needs to receive special education services they must have a qualifying diagnosis. Several investigators have examined the impact of diagnostic labels on teacher attitudes towards children with disabilities. Gillung and Rucker (1977) exposed teachers to labeled and unlabeled behavioral descriptions of a child with a disability and examined teacher educational expectations. Unlabeled or labeled descriptions of intellectual disability, emotional disturbance, and learning disability were included in the vignette.

Participants read the description and indicated what they perceived as the most appropriate educational setting for each child. Both regular education and special education teachers chose more restrictive settings (e.g. self-contained classrooms) for children who were labeled than children with identical behaviors without a label (Gillung & Rucker).

Aloia and MacMillan (1983) examined the role of an intellectual disability label on teachers' perceptions regarding classroom behavior, academic potential, ability to work with the child and their overall attitude toward the child. Survey booklets regarding a hypothetical child including a picture, school characteristics, and no label or a label of EMR were randomly distributed to Kindergarten through sixth grade teachers. There were no differences regarding classroom behavior perceptions for students with a label in comparison to the control. Teachers' perceptions of the child with the label were lower for academics, lower for their ability to work with the student, and their overall general impression was lower than for the child without a disability label.

Thelen, Burns and Christiansen (2003) exposed teachers to vignettes describing a student without mentioning a disability or using a label of learning disability, mild intellectual disability, or emotional disturbance. After reading the vignettes, the teachers rated behavioral, interpersonal, and academic-success expectations for the child. Analyses revealed interpersonal expectations were higher for individuals with disability labels versus the control group. However, the opposite was found for behavioral and academic expectations. Relative to controls, students with labels were expected by teachers to have more behavior concerns (i.e. needing more supervision, being disruptive in the classroom, etc.). Students labeled as having an emotional disability were expected to have significantly more behavior concerns than all other groups. Teachers also expected more academic problems (i.e. not able to pass a grade, not able to

obtain a diploma) for students with a disability label than for students with the same description without a label. Academic expectations for individuals with diagnostic labels were the lowest compared to other ratings (Thelen et al.).

The above review suggests that placements in inclusion classrooms offer benefits to children with disabilities. Social and academic benefits are most likely to occur where teachers embrace evidence-based instructional strategies such as behavior management strategies and peer tutoring. Data also suggests that teacher attitudes towards children with disabilities are important in teachers' willingness to make accommodations for students with special needs. Unfortunately, the data also suggest that regardless of teaching experience, inclusion teachers may respond more favorably to children with intellectual rather than physical disabilities, and the most negatively toward students with socio-emotional or behavior difficulties. Additionally, diagnostic labels may also negatively influence teachers' attitudes toward disabled students. This is a significant issue since there is considerable behavioral, cognitive, and social emotional variability within diagnostic categories.

In recent years there has been a dramatic increase in the number of high functioning children with ASD spending time in inclusion classrooms. Children with ASDs tend to be viewed by teachers as having an emotional/behavioral disability rather than learning or developmental disability (Helps, Newsome-Davis, & Calias, 1999). The purpose of the present investigation was to examine the impact of a label of autism (ASD) on teachers' attitudes and behavioral intentions. A sample of teachers was asked to read vignettes about a student displaying a number of behavioral concerns. Some vignettes included only a description of the child while others will include a disability label of autism (ASD), mild intellectual disability (EMR), or Attention Deficit-Hyperactivity Disorder (ADHD). Participants were asked to

complete measures of attitudes toward the child and the child's abilities, attitude toward inclusion, and willingness to utilize inclusion strategies. It was expected that participants would have more negative attitudes toward the child and inclusion as well as fewer intentions to utilize inclusion strategies for the child labeled ASD in comparison to the child with no label, a label of EMR or ADHD. Furthermore, it was predicted that participants would exhibit more negative judgments of the child's academic capabilities when the child is labeled with ASD or EMR than with a label of ADHD or no label.



## METHOD

### *Participants*

The sample consisted of 97 teachers employed in a public school district in the Mississippi Delta. Participants were primarily Caucasian (57.7%), followed by African American (40.2%), South Asian (1%) and Other (1%). The majority of participants were female (87.6%). Participants' ages ranged from 22 to 64 and teaching experience ranged from 1 to 39 years. Majority of participants (59.8%) held a Bachelor's Degree; some of those individuals (26.8%) also took additional courses. The remainder of participants (38.1%) had a Master's Degree (24.75), had a Master's and had taken additional courses (12.4%), or had their Doctorate (1%). All participants were included in a raffle as an incentive to participate.

### *Measures*

*Response to inclusion:* The Response to Inclusion Survey (Soodak, Podell, & Lehman, 1998) is an instrument designed to assess how teachers feel about the inclusion of a child with special needs in their classroom. Initial development included a vignette with a school principal stating that a child with a disability will be in the teacher's classroom. Participants were randomly assigned to one of the following disabilities: hearing impairment, learning disability, mental retardation, behavioral disturbance, and a physical disability requiring the use of a wheelchair. Teachers were then asked to rate their feelings regarding the inclusion of the child on 17 adjectives rated on a 4-point Likert-type scale ranging (e.g. *enthusiastic, somewhat enthusiastic, somewhat unenthusiastic, unenthusiastic*).

Factor analyses of the Response to Inclusion Survey indicated a two factor structure: Hostility/Receptivity and Anxiety/Calmness (Soodak et al., 1998). Internal consistency, using Cronbach's alpha was found to be .92 for Hostility/Receptivity and .87 for Anxiety/Calmness (Soodak et al., 1998). With a slightly modified version of the Response to Inclusion Survey, Shippen, Crites, Houchins, Ramsey, and Simon (2005) found 3 week test re-test reliability coefficients of .93 for the Hostility/Receptivity factor, .91 for the Anxiety/Calmness factor, and .96 for the survey overall. Shippen et al. (2005) affirmed its content validity. For the purposes of this study the vignette portion of the survey was modified and the child in the vignette was assigned one of the following disability labels; ADHD, EMR, ASD, or control. In the current study, the Cronbach's alpha coefficient was .93 for the survey overall.

*Attitude toward inclusion:* The Impact of Inclusion Questionnaire (IIQ, Hastings & Oakford, 2003) was developed to allow comparisons to be made between different groups of children with disabilities. The disability being investigated is to be entered into the questionnaire prior to use. Twenty four items were developed with 6 questions in each of four domains: the impact of inclusion on the target child, the impact of inclusion on other students in the classroom, the impact of inclusion on the teacher, and the impact of inclusion on the school or classroom environment. Twenty three items were retained in the final version of the IIQ since one of the items in the other children domain was not found to correlate with the total score. Each item is rated on a seven point scale ranging from 'very strongly agree' to 'very strongly disagree'. Domain scores, as well as a total score, are able to be obtained by summing responses. Negatively phrased items are reversed scored so that higher scores indicate more positive attitudes. Internal consistency scores for the scale are in the acceptable range (Hastings & Oakford, 2003). For the current study, the Cronbach alpha coefficient was .89.

*Expectations and Perceptions:* Expectations were measured with the Prognostic Judgment Scale (Fox & Stinnet, 1996) with item modifications as measured by Thelen et al. (2003). Initial development included a vignette describing a child with a diagnostic label of emotional disturbance, conduct disorder, social maladjustment, or no exceptionality. Following the vignette participants were asked to rate a 9-item scale measuring participants' expectations regarding the likelihood of challenging behaviors, interpersonal difficulties, and scholastic challenges in the child's future.

Ratings ranged from *extremely unlikely* (1) to *extremely likely* (100). After reverse scoring some of the items, overall higher scores reflected a better overall prognostic outlook. Thelen et al. (2003) removed one item (*overall level of adjustment*) and included additional item (*will be held back a year in school*). Confirmatory factor analysis of the revised Prognostic Judgment Scale indicated a 3-factor structure: Interpersonal (e.g., *will develop adequate and appropriate peer relationships*), Behavioral (e.g., *will need constant personal supervision by teachers to be successful in school*), and Academic (e.g. *will obtain a high school diploma*). In the current study the vignette portion of the scale was replaced with the modified vignette designed by the researcher. Internal consistency for the purpose of this study was found to be acceptable (Cronbach alpha coefficient of .78).

Perceptions regarding failure were measured with items similar to those used in a study performed by Weisz (1981). Six items (e.g. *How likely is it that the child failed because of insufficient effort, how likely is it that the child will succeed at completing the task if it is given to him the next day, etc.*) were measured on a 6-point Likert-type scale ranging from *not likely at all* (0 points) to *extremely likely* (5 points). Scores indicated perceived reasons for failure, likelihood of continued failure, and raters' probable future behavior following failures.

*Intentions:* Behavioral intentions were measured with a questionnaire designed to measure which instructional strategies and behavioral modification techniques regular education teachers would be willing to use in a classroom setting with students with and without disabilities (Ellet, 1993). The original questionnaire was comprised of 35 items; 19 of which were taken from a similar measure composed by Johnson and Pugach (1990). Teachers were asked how likely they would be to use each intervention in the regular classroom. Ratings were based on a 4-point Likert scale ranging from 1 (*very unlikely*) and 4 (*very likely*). Factor analysis was performed with 7 emerging factors meeting the criteria of eigen values greater than 1.0. Factors included Use of Supplemental Resources, Simplify Instruction, Provide Students with Support and Extra Instructional Cues, Enhance Classroom Behavior-Management Procedures, Facilitate Grade Improvement, Modify Learning Environment, and Teach Study Skills and Provide Positive, Cooperative Learning Environment. The current study yielded a Cronbach alpha coefficient of .90 for the total scale.

### *Stimulus Materials*

*Vignette:* A vignette describing an elementary school student who exhibits social concerns and challenging behaviors in the school setting (i.e., interrupting others, fidgeting, tantrums, etc.) was developed. The child depicted in the vignette was described as having a label of ADHD, EMR, ASD, or no label. The vignette was developed following a survey of the literature and overlapping diagnosing criteria (APA, 2000). The vignette was subjected to review by a group of University of Mississippi faculty as well as psychologists who work with individuals such as those described.

## *Procedures*

Participants gathered into a designated room following an announcement. The researcher gave an overview of the study. Packets were randomly assigned and distributed to each participant. The label of the child in the vignette (no label, ASD, ADHD, or EMD label) differed for participants with each receiving one of the four conditions. Packets consisted of a demographic questionnaire, the vignette designed for the study, the Response to Inclusion Survey, the Impact of Inclusion Questionnaire, the Prognostic Judgment Scale, the measure of perceptions regarding failure, and the behavioral intentions measure. Instruments were stapled in a specific order in order to ensure counterbalanced presentation.

## RESULTS

### *Data Cleaning and Preliminary Analysis*

Prior to conducting statistical analyses, the data set was examined with respect to missing values and accuracy of data entry. Measures not completely or correctly filled out were excluded only if the missing data were required for the specific analysis being performed. As shown in Table 1, Descriptive statistics were obtained for all scales.

Table 1  
*Descriptive Statistics for Key Variables*

		ADHD Label	ASD Label	EMR Label	No Label
Response to Inclusion Scale	Mean	45.04	43.15	45.35	45.78
	SD	8.63	9.18	8.96	10.49
Impact of Inclusion Scale	Mean	97.13	101.42	98.42	91.11
	SD	14.41	14.50	15.61	19.34
Prognostic Judgment Scale	Mean	52.35	53.71	51.36	51.85
	SD	11.96	8.32	13.48	14.46
Behavioral Intentions Scale	Mean	85.13	84.34	86.60	85.75
	SD	10.09	9.99	7.88	9.01
PRF 1	Mean	2.88	1.96	2.86	2.45
	SD	1.27	1.27	1.46	1.93
PRF 3	Mean	2.38	2.96	2.73	2.95

	SD	1.53	1.45	1.23	1.54
PRF 5	Mean	3.25	3.08	3.22	3.00
	SD	.94	.91	1.31	1.49
PRF 6	Mean	3.71	3.36	3.48	3.05
	SD	.95	1.44	1.34	1.76

### *Influence of Label on Attitudes and Behavioral Intentions*

Preliminary assumption testing was conducted to check for linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multi-collinearity, with no serious violations noted. Normality violations were found, however, previous studies have found  $F$  to be robust to non-normality when violations are not a result of outliers (Tabachnick & Fidell, 2007). No substantial Mahalanobis outliers were found.

In order to examine the impact of a child's disability label on teacher attitudes a one-way multivariate analysis of variance (MANOVA) was performed with disability label as the independent variable and total scores of the Response to Inclusion Survey, IIQ, Prognostic Judgment Scale, behavioral intention scale, and two items measuring perceptions regarding failure (Weisz; 1981) as the dependent variables. The overall  $F$  was not significant,  $F(6, 64) = 0.83, p = .661$ , Wilks'  $\Lambda = .80$ ; partial eta squared = .07.

### *Supplemental Analyses*

A correlation matrix was generated to explore bivariate relationships among the demographic variables (see Table 2). Number of inclusion classes was correlated with number of trainings received ( $r = .590, p < .01$ ), reported familiarity with children with disabilities ( $r = .435, p < .01$ ), and perceived knowledge regarding teaching children with disabilities ( $r = .427, p$

< .01). A significant positive correlation was found for the number of trainings received and reported familiarity ( $r = .534, p < .01$ ) and reported knowledge ( $r = .487, p < .01$ ). Familiarity with children with disabilities was significantly positively correlated with perceived knowledge of educating children with disabilities ( $r = .448, p < .01$ ).

Table 2

*Bivariate Relationships among Demographic Variables*

	1	2	3	4	5	6
1. Type of Degree	--	.187	-.22	.154	.134	.013
2. Inclusion/ Special Education Courses		--	.34	.590**	.435**	.427**
3. Years of Experience			--	.086	.185	.017
4. Trainings Attended				--	.534**	.487**
5. Familiarity with children with disabilities					--	.448**
6. Perceived Knowledge of disabilities						--

Table 3

*Correlations among Key Variables*

	Degree obtained	Inclusion/ Special Education Classes	Years of Experience	Number of trainings	Familiarity with a child with special needs	Perceived knowledge
PRF question 1	.012	.001	.181	-.045	-.170	-.064
PRF question 3	-.062	-.063	.024	-.067	-.115	.002
PRF question 5	-.064	.137	-.014	.112	.003	.135
PRF question 6	.048	.037	-.206*	-.010	.024	.063
Total PJS	-.50	-.007	-.281**	.149	.161	.213*



Total IIQ	.068	.097	-.330**	.132	.244*	.383**
Total RIS	.050	.318**	-.384**	.296**	.310**	.442**
Behavioral Intentions	-.055	.273*	.201	.091	.112	.119

Note. \* $p < .05$ , two-tailed. \*\* $p < .01$ , two tailed. PRF question 1 = failure due to lack of effort; PRF 3 = failure due to bad luck; PRF 5 = probability of future success on failed task; PRF 6 = probability of insisting the student reattempt the failed task in the future; PJS = Prognostic Judgment Scale; IIQ = Impact of Inclusion Questionnaire; RIS = Response to Inclusion Survey.

As illustrated in Table 3, Pearson’s bi-variate correlations were computed in order to explore relationships among variables. Based on the significant correlations among demographic variables and the dependent variables, separate standard multiple regressions were performed for outcome variables. Preliminary analyses were conducted prior to each multiple regression analysis to ensure no violation of the assumptions of normality, linearity, multicollinearity, and homoscedasticity. Items regarding perceptions of failure and behavioral intentions were not included due to skewed distributions.

A multiple regression analysis was conducted with expectations of the child with special needs’ future progress (prognostic judgment scale) as the outcome variable and perceived knowledge regarding educating children with disabilities and years of experience as predictor variables (see Table 4). The model was significant [ $F(2, 85) = 6.13, p < .005$ ], accounting for 13% of the variance ( $R^2 = .126$ ).

Table 4

<b>Variable</b>	<b>B</b>	<b>SE (B)</b>	<b><math>\beta</math></b>	<b>Sig. (p)</b>
Years of Experience	-.296	.106	-.284	.006
Perceived Knowledge	1.208	.563	.218	.035

Beliefs regarding the overall impact of inclusion (IIQ) was entered as the outcome variable in the second multiple regression analysis, with perceived knowledge regarding educating children with disabilities, years of experience, and familiarity with children with disabilities entered as predictor variables (see Table 5). The model was significant [ $F(3, 84) = 11.06, p < .0005$ ] and accounted for 28% of the variance ( $R^2 = .283$ ).

Table 5

*Summary of Multiple Regression Analysis for Beliefs Regarding Inclusion*

Variable	B	SE (B)	$\beta$	Sig. (p)
Years of Experience	-.511	.131	-.367	.000
Perceived Knowledge	2.312	.767	.312	.003
Familiarity	1.778	1.086	.173	.105

A multiple regression analysis was conducted with affective response regarding the inclusion of a child with special needs (Response to Inclusion Scale) as the outcome variable and perceived knowledge regarding educating children with disabilities, years of experience, familiarity with children with disabilities, number of inclusion or special education classes and number of special education related trainings as predictor variables (see Table 6). The model accounted for 40% of the variance ( $R^2 = .401$ ) and was significant [ $F(5, 68) = 9.104, p < .0005$ ].

Table 6

*Summary of Multiple Regression Analysis for Affective Responses to Inclusion*

Variable	B	SE (B)	$\beta$	Sig. (p)
Years of Experience	-.343	.076	-.431	.000
Perceived Knowledge	1.306	.478	.309	.008
Familiarity	1.163	.694	.198	.098
Inclusion/SPED classes	.351	.396	.106	.379
Trainings in SPED topics	.016	.141	.014	.913

## DISCUSSION

Disability labels were not found to impact educators' attitudes, expectations, or behavioral intentions. This finding is inconsistent with a number of studies reporting a negative impact of labels (Gillung & Rucker, 1977; Aloia & MacMillan, 1983; and Thelen et al., 2003). Compared with prior studies where vignettes involved general descriptions of children with classroom concerns (e.g. "when he is good he is very good, but when he is bad he is terrible" as described in Thelen et al., 2003, p. 86), the vignettes used in the present study included clear descriptions of challenging classroom behaviors displayed by the child. The child was actively exhibiting problematic social (e.g., "does not have many friends") and disruptive behaviors (e.g., "damages items in the classroom"). It may be that when social and/or behavioral concerns are present they are more salient stimuli for teachers than a child's disability label. Several researchers have suggested teachers are less accepting of students with behavioral and/or social concerns (Hastings & Oakford, 2003; Robertson et al., 2003; Levins et al., 2005). Cornett-Ruiz and Hendricks (1993) also reported when social and/or behavioral concerns are present, a child's disability label has less of an influence on teacher attitudes.

Regression analyses revealed years of experience and perceived knowledge regarding teaching children with disabilities accounted for the most variance in predictions of educators' expectations, affective responses to inclusion, and overall inclusion attitudes. Specifically, less experience and higher self-efficacy predicted more positive attitudes and higher student performance expectations. Educators responsible for inclusion are teaching in a complex and demanding environment, frequently with limited resources available. Studies suggest that

compared to urban school districts, schools in rural areas confront higher prevalence rates of social issues such as behavior problems and crime, while offering fewer services to students with special needs (Helge, 1993; Monk, 2007). The current study involved a sample of teachers from a rural school district located in a community characterized by significant social, behavioral (e.g., crime and violence), and economic disadvantage. It is possible the combination of social factors coupled with severe resource limitations resulted in a history of limited success regarding the academic attainment and social/behavioral management of students with special needs in their classrooms. It may be that teachers in the early stages of their careers have more positive attitudes towards inclusion as a result of a shorter history of negative experiences with this educational outcome.

#### *Limitations and Future Directions*

Demographics of the present sample indicate the school district is located in a rural community composed largely of African American (94.34%) students, with the majority of families being of low socio-economic status (89.8% eligible for free lunch). In order to determine generalizability of these data future work should involve a diverse sample.

Perceived knowledge was found to have a positive relationship with educators' attitudes and expectations. However, actual knowledge was not assessed in the current study. It would be beneficial for future studies to include objective measures of teacher knowledge regarding effective classroom interventions for students with disabilities. Additionally, it may be informative to examine the relationship between teachers' actual knowledge and perceived knowledge.

As previously stated, research indicates that utilization of effective inclusion strategies is important to the success of students with disabilities. The current study aimed to examine the relationship between student disability labels, teachers' attitudes and expectations, and teachers' intentions to utilize inclusion strategies. The behavioral intentions scale used demonstrated strong internal consistency (Cronbach alpha coefficient of .90). However, there are no data regarding its predictive validity. Moreover, participants responded in an overly positive manner on the measure. Future work would benefit from utilization of naturalistic observation in order to examine actual classroom practices.

The present data suggest that relative to very experienced teachers, educators begin their careers with more favorable attitudes and intentions towards students with disabilities. One possible explanation for this relationship is that over time, teachers' inability to effectively manage challenging behaviors and attain academic success with children with disabilities results in a decreased willingness to work with such children. Studies have found that teacher in-service training emphasizing behavior management strategies result in teacher and student positive behavior change (Jones & Chronis- Tuscano, 2008; Snyder et al., 2011; Webster-Stratton & Reid, 2010). Results of work performed by Hastings, Hewes, Lock, and Witting (1996) indicate training focused solely on understanding disabilities does not lead to changes in classroom practices. In-service training may prove beneficial for teachers, as well as their students with special needs, when training objectives surround active classroom management as opposed to understanding disabilities. It may be that facilitating early success with managing children with challenging behaviors in the classroom (e.g. student teachers pairing with teacher's adept in classroom management) may prove advantageous for inclusion classrooms.

## REFERENCES

- Aloia, G. F. & MacMillan, D.L. (1983). Influence of the label EMR on the initial expectations of regular-classroom teachers. *American Journal of Mental Deficiency, 3* (88), 255-262.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders (4<sup>th</sup> ed., text revision)*. Washington, DC: Author.
- Bender, W. N., Vail, C. O., & Scott, K. (1995). Teachers' attitudes toward increased mainstreaming: implementing effective instruction for students with learning disabilities. *Journal of Learning Disabilities, 28* (2), 87-94.
- Bishop, S. L., Luster, R., Richler, J., & Lord, C. (2008) Diagnostic Assessment. In Chawarska, K., Klin, A., & Volkmar, F. R., *Autism spectrum disorders in infants and toddlers: diagnosis, assessment, and treatment* (pp. 23-49). US: Guilford Press.
- Boutot, E. A. & Bryant, D. P. (2005). Social integration of students with autism in inclusive settings. *Education and Training in Developmental Disabilities, 40*, 14-23.
- Carlberg, C. & Kavale, K. (1980). The efficacy of special versus regular class placement for exceptional children: a meta-analysis. *The Journal of Special Education, 14*, 259-309.
- Cascella, P. W. & Coella, C. S. (2004). Knowledge of autism spectrum disorders among Connecticut school speech-language pathologists. *Focus on Autism and Other Developmental Disabilities, 19*, 245-252.
- Centers for Disease Control and Prevention, "Prevalence of Autism Spectrum Disorders — Autism and Developmental Disabilities Monitoring Network, 14 Sites, United States, 2002", *MMWR Surveillance Summaries, 56* (No. SS-01) (February 9 2007), 12-28.

- Cole, D. A. & Meyer, L.H. (1991). Social integration and severe disabilities: a longitudinal analysis of child outcomes. *The Journal of Special Education, 25*, 340-351.
- Cornett-Ruiz, S. & Hendricks, B. (1993). Effects of labeling and ADHD behaviors on peer and teacher judgments. *The Journal of Educational Research, 86*, 349-355.
- Croen, L. A., Grether, J. K., Hoogstrate, J. & Selvin, S. (2002). The changing prevalence of autism in California. *Journal of Autism and Developmental Disorders, 32*, 207-215.
- Daniel, L. G. & King, D. A. (1997). Impact of inclusive education on academic achievement, student behavior and self-esteem, and parental attitudes. *The Journal of Educational Research, 91*, 67-80.
- DuPaul, G. J., & Ervin, R. A. (1996). Functional assessment of behaviors related to Attention-Deficit/Hyperactivity Disorder: Linking assessment to intervention design. *Behavior Therapy, 27*, 601-622.
- DuPaul, G. J., Ervin, R. A., Hook, C. L., & McGoey, K. E. (1998). Peer tutoring for children with Attention Deficit Hyperactivity Disorder: Effects on classroom behavior and academic performance. *Journal of Applied Behavior Analysis, 31*, 579-592
- Edelson, M. G. (2006). Are the majority of children with autism mentally retarded; a systemic evaluation of the data. *Focus on Autism and Other Developmental Disabilities, 21*, 66-83.
- Ellet, L. (1993). Instructional practices in mainstreamed secondary classrooms. *Journal of Learning Disabilities, 26*, 57-64.
- Forness, S. R. (2001). Special education and related services: what have we learned from meta-analysis? *Exceptionality, (9)*, 185-197.



- Fox, J. D. & Stinnet, T. A. (1996). The effects of labeling bias on prognostic outlook for children as a function of diagnostic label and profession. *Psychology in the Schools, 33*, 143-152.
- Freeman, S. F. & Alkin, M. C. (2000). Academic and social attainments of children with mental retardation in general education and special education settings. *Remedial and Special Education, 21*, 3-18.
- Gillung, T. B. & Rucker, C. N. (1977). Labels and teacher expectations. *Exceptional Children, 43*, 464-465.
- Gresham, F. M., & Watson, T. S., & Skinner, C. H. (2001). Functional behavioral assessment: Principles, procedures, and future directions. *School Psychology Review, 30*, 156–172.
- Harris, S. L., Handleman, J. S., Kristoff, B., Bass, L., & Gordon, R. (1990). Changes in language development among autistic and peer children in segregated and integrated preschool settings. *Journal of Autism and Developmental Disorders, 20*, 23-31.
- Hastings, R. P., Hewes, A., Lock, S., & Wittting, A. (1996). Do special educational needs courses have any impact on student teachers' perceptions of children with severe learning difficulties? *British Journal of Special Education, 23*, 139-144.
- Hastings, R. P. & Oakford, S. (2003). Student teachers' attitudes towards the inclusion of children with special needs. *Educational Psychology, 23*, 87-94.
- Helps, S., Newsome-Davis, I. C., & Callias, M. (1999). Autism: the teacher's view. *Autism, 3*, 287-298.

- Johnson, L. J. & Pugach, M. C. (1990). Classroom teachers' views of intervention strategies for learning and behavior problems: Which are reasonable and how frequently are they used? *The Journal of Special Education, 24*, 69-84.
- Jones, H. A. & Chronis-Tuscano, A. (2008). Efficacy of teacher in-service training for Attention-Deficit/Hyperactivity Disorder. *Psychology in the Schools, 45*, 918-929.
- Jordan, R. (2005). Managing autism and Asperger's syndrome in current educational provision. *Pediatric Rehabilitation, 8*, 104-112.
- Kamps, D. M., Barbetta, P. M., Leonard, B. R., Delquadri, J. (1994). Classwide peer tutoring: an integration strategy to improve reading skills and promote peer interactions among students with autism and general education peers. *Journal of Applied Behavior Analysis, 27*, 49-61.
- Knight, B. A. (1999). Towards inclusion of students with special educational needs in the regular classroom. *Support for Learning, 14*(1), 3-7.
- Levins, T., Bornholt, L, & Lennon, B. (2005). Teachers' experience, attitudes, feelings and behavioral intentions towards children with special educational needs. *Social Psychology of Education, 8*, 329-343.
- Lovaas, O. I. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology, 1*, 3-9.
- Monk, D. H. (2007). Recruiting and retaining high-quality teachers in rural areas. *The Future of Children, 17*, 155-174.

- Odom, S. L., Brown, W. H., Frey, T., Karasu, N., Smith-Canter, L. L., & Strain, P. S. (2003). Evidence-based practices for young children with autism: contributions for single-subject design research. *Focus on Autism and Other Developmental Disabilities, 18*, 166-175.
- Odom, S. L., & Watts, E. (1991). Reducing teacher prompts in peer-mediated interventions for young children with autism. *Journal of Special Education, 25*, 26–43.
- Rea, P. J., McLaughlin, V. L., & Walther-Thomas, C. (2002). Outcomes for students with learning disabilities in inclusive and pullout programs. *Exceptional Children, 68*, 203-222.
- Robertson, K., Chamberlain, B., & Kasari, C. (2003). General education teachers' relationships with included students with autism. *Journal of Autism and Developmental Disabilities, 3*, 123-130.
- Salend, S. J. & Garrick-Duhaney, L. M. (1999). The impact of inclusion on students with and without disabilities and their educators. *Remedial and Special Education, 20*, 207-216.
- Shippen, M. E., Crities, S. A., Houchins, D. E., Ramsey M. L., & Simon, M. (2005). Pre-service teachers' perceptions of including students with disabilities. *Teacher Education and Special Education, 28*, 92-99.
- Snyder, J., Low, S., Schultz, T., Barner, S., Moreno, D., Garst, M., Leiker, R., Swink, N., & Schrepferman, L. (2011). The impact of brief teacher training on classroom management and child behavior in at-risk preschool settings: Mediators and treatment utility. *Journal of Applied Developmental Psychology, 22*,

- Soodak, L.C., Podell, D. M., and Lehman, L.R. (1998). Teacher, student, and school attributes as predictors of teachers responses to inclusion. *The Journal of Special Education, 31*, 480-497.
- Tabachnick, B. G. and Fidell, L. S. (2007). *Using Multivariate Statistics*; Fifth Edition. Pearson Education, Inc. Boston, MA.
- Thelen, R. L., Burns, M. K., & Christiansen, N. D. (2003). Effects of high-incidence disability labels on the expectations of teachers, peers, and college students. *Ethical Human Sciences and Services, 5*, 183-193.
- U.S. Department of Education, (1999). To assure the free appropriate public education of all children with disabilities. *Twenty-first annual report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- U.S. Department of Education, (2005). To assure the free appropriate public education of all children with disabilities. *Twenty-seventh annual report to Congress on the Implementation of the Individuals with Disabilities Education Act*. Washington, DC: Author.
- Webster-Stratton, C. & Reid, M. J. (2010). The Incredible Years Parents, Teachers, and Children Training Series; A multifaceted treatment approach for young children with conduct disorders. In Weisz, J. R. & Kazdin, A. E., *Evidence-Based Psychotherapies for Children and Adolescents: Second Edition* (pp. 194-210). Guilford Press.
- Weisz, J. R. (1981). Effects of the “mentally retarded” label on adult judgments about child failure. *Journal of Abnormal Psychology, 90*, 371-374.

- Williams, T. O. & Eaves, R. C. (2005). Factor analysis of the Pervasive Developmental Disorders rating scale with teacher ratings of students with autistic disorder. *Psychology in the Schools, 42*, 207-216.
- White, S. W., Scahill, L., Klinn, A., Koenig, K., Volkmar, F. R. (2007). Educational placements and service use patterns of individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders, 37*, 1403-1412.
- Wing, L. (1997). The history of ideas on autism: legends, myths, and reality. *Autism, 1*, 13-23.
- Yianni-Coudurier, C., Darrou, C., Lenoir, P., Verrecchia, B., Ledesert, B., Michelon, C., Pry, R., Aussilloux, C., & Baghdadli, A. (2008). What clinical characteristics of children with autism influence their inclusion in regular classrooms?. *Journal of Intellectual Disability Research, 52*, 855-863.

## LIST OF APPENDICES

## Appendix: A

### Response to Inclusion Survey

Your principal reports that John will be moving to your classroom next week. Please circle the word, from the word groups of four, that best describes your feelings.

You walk out of the meeting with your principal feeling....

- |     |              |                          |                            |                |
|-----|--------------|--------------------------|----------------------------|----------------|
| 1.  | Enthusiastic | Somewhat<br>Enthusiastic | Somewhat<br>Unenthusiastic | Unenthusiastic |
| 2.  | Scared       | Somewhat Scared          | Somewhat Fearless          | Fearless       |
| 3.  | Anxious      | Somewhat Anxious         | Somewhat Relaxed           | Relaxed        |
| 4.  | Comfortable  | Somewhat<br>Comfortable  | Somewhat<br>Uncomfortable  | Uncomfortable  |
| 5.  | Angry        | Somewhat Angry           | Somewhat Not angry         | Not Angry      |
| 6.  | Unwilling    | Somewhat Unwilling       | Somewhat Willing           | Willing        |
| 7.  | Interested   | Somewhat Interested      | Somewhat<br>Disinterested  | Disinterested  |
| 8.  | Confident    | Somewhat Confident       | Somewhat Insecure          | Insecure       |
| 9.  | Nervous      | Somewhat Nervous         | Somewhat Calm              | Calm           |
| 10. | Pleased      | Somewhat Pleased         | Somewhat Displeased        | Displeased     |
| 11. | Weak         | Somewhat Weak            | Somewhat Powerful          | Powerful       |
| 12. | Annoyed      | Somewhat Annoyed         | Somewhat Indifferent       | Indifferent    |
| 13. | Accepting    | Somewhat Accepting       | Somewhat Opposing          | Opposing       |



14.	Prepared	Somewhat Prepared	Somewhat Unprepared	Unprepared
15.	Happy	Somewhat Happy	Somewhat Sad	Sad
16.	Pessimistic	Somewhat Pessimistic	Somewhat Optimistic	Optimistic
17.	Resistant	Somewhat Resistant	Somewhat Cooperative	Cooperative

## Appendix: B

## Impact of Inclusion Questionnaire (IIQ)

Listed below are a number of statements about children like John. Please read each statement carefully as some may contain double negatives. Use the scale below each statement to indicate your agreement or disagreement with the statement. Circle the point on the scale that best represents your opinion.

VSA- very strongly agree; SA- strongly agree; A- agree; U- undecided; D- disagree; SD- strongly disagree; VSD- very strongly disagree

If you agree with the statement, you will circle VSA, SA, or A, depending on how strong your agreement was. Similarly, if you disagree with the statement you will circle VSD, SD, or D. If you were undecided about your opinion, you will circle U.

Having children like John in my class would... (having children with a LD in my class would...)

1. ... physically wear me out \_\_\_\_\_
2. ... interrupt the classroom routine \_\_\_\_\_
3. ... *not* prevent me from giving attention to the other children in the class \_\_\_\_\_
4. ... give them an audience to preform to \_\_\_\_\_
5. ... drain the school's financial resources \_\_\_\_\_
6. ... *not* place me under additional stress \_\_\_\_\_
7. ... lead to rejection from other children within the classroom \_\_\_\_\_
8. ... upset the other children in the classroom \_\_\_\_\_
9. ... not pose a physical threat to me \_\_\_\_\_
10. ... negatively affect the smooth running of the school \_\_\_\_\_
11. ... not cause disruption within the classroom \_\_\_\_\_
12. ... increase other children's problematic behavior in the classroom \_\_\_\_\_
13. ... be popular with parents \_\_\_\_\_
14. ... take up a disproportionate amount of my time \_\_\_\_\_
15. ... not place the other children in danger \_\_\_\_\_

16. ... not encourage their difficult behavior \_\_\_\_\_
17. ... not drain me emotionally \_\_\_\_\_
18. ... hold back their academic performance \_\_\_\_\_
19. ... give people a more positive view of the school \_\_\_\_\_
20. ... not be a frightening experience for them \_\_\_\_\_
21. ... increase my workload to an unacceptable level \_\_\_\_\_
22. ... increase other children's learning opportunities in the classroom \_\_\_\_\_
23. ... benefit their personal development \_\_\_\_\_
24. ... negatively affect the achievement of other children in the classroom \_\_\_\_\_

## Appendix: C

### Prognostic Judgment Scale

The following statements are regarding your beliefs about John's future. Please rate each item from 1 to 100, with 1 being *extremely unlikely* and 100 being *extremely likely*.

John will...

- ... develop adequate and appropriate peer relationships \_\_\_\_\_
- ... develop adequate and appropriate relationships with school staff \_\_\_\_\_
- ... develop adequate and appropriate relationships with family \_\_\_\_\_
- ... obtain and hold a job for a reasonable length of time (1 year or more) \_\_\_\_\_
- ... continue to be a disruptive force in the classroom \_\_\_\_\_
- ... need constant supervision by his teachers to be successful in school \_\_\_\_\_
- ... have problems with law enforcement authorities in the future \_\_\_\_\_
- ... be retained a grade in school \_\_\_\_\_
- ... obtain a high school diploma \_\_\_\_\_

## Appendix: D

### Perceptions Regarding Failure

You give John a task to complete. John attempts the task but has trouble succeeding. After several minutes he stops, having failed to complete the task correctly. Please use the following rating system to rate each item... 0 = *Not Likely at All* to 5 = *Extremely Likely*

How likely is it that John failed the task because of ... insufficient effort? \_\_\_\_\_

How likely is it that John failed the task because of ... bad luck? \_\_\_\_\_

How likely is it that John failed the task because of ... insufficient ability? \_\_\_\_\_

How likely is it that John failed the task because of ... task difficulty? \_\_\_\_\_

How likely is it that John will succeed at completing the task if it is given to him the next day? \_\_\_\_\_

What is the likelihood of you insisting that John continue with/reattempt the failed task? \_\_\_\_\_



## Appendix: E

## Behavioral Intentions

Please rate how reasonable it would be to use each intervention in the classroom.

1 = *unreasonable intervention* - 4 = *reasonable intervention*

Please rate the how likely you would be to use each intervention in the classroom

1 = very unlikely – 4 = very likely

1. Encourage and support student's attempts at academic improvement \_\_\_\_\_
2. Collect data from other teachers about student's behavior problem \_\_\_\_\_
3. Demonstrate difficult tasks for the student \_\_\_\_\_
4. Talk with the student's parent about ways to work on the student's academic problem \_\_\_\_\_
5. Establish specific consequences for appropriate student behavior \_\_\_\_\_
6. Emphasize the good qualities of the student's behavior \_\_\_\_\_
7. Talk with other classroom teachers about ways to work on the student's academic problem \_\_\_\_\_
8. Use peer tutors, volunteers, or aide to work with student individually \_\_\_\_\_
9. Change the physical arrangement of the room \_\_\_\_\_
10. Ignore inappropriate behavior and attempt to change it using a positive approach \_\_\_\_\_
11. Establish specific consequences for inappropriate student behavior, such as taking privileges away, assigning after-school detention, etc. \_\_\_\_\_
12. Use cooperative learning \_\_\_\_\_
13. Set up organizers, such as an assignment calendar and three-ring notebook \_\_\_\_\_
14. Use supplementary instructional techniques, such as calculators and audio recording of textbooks \_\_\_\_\_
15. Talk with school psychologist, special education teachers, counselor, or other school personnel concerning alternate methods of instruction \_\_\_\_\_
16. Post or share grades with students on a regular basis between marking periods \_\_\_\_\_
17. Use both auditory and visual modes when presenting new information \_\_\_\_\_
18. Provide additional or alternate ways of improving grades, such as extra credit or retake tests \_\_\_\_\_
19. Teach learning strategies, such as note taking, test taking, and understanding the textbook \_\_\_\_\_

- 20. Modify test-taking procedures (e.g., open-book or open-notes tests) \_\_\_\_\_
- 21. Give instructions step by step \_\_\_\_\_
- 22. Use alternate materials, if provided \_\_\_\_\_
- 23. Clarify behavioral expectations to the student \_\_\_\_\_
- 24. Present same information at a slower pace or in a different sequence \_\_\_\_\_

## Appendix: F

### Marlowe-Crowne Social Desirability Scale – Short Form (Form C)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is *true* or *false* as it pertains to you personally.

1. It is sometimes hard for me to go on with my work if I am not encouraged.
2. I sometimes feel resentful when I don't get my way.
3. On a few occasions, I have given up doing something because I thought too little of my ability.
4. There have been times when I felt like rebelling against people in authority even though I knew they were right.
5. No matter who I'm talking to, I'm always a good listener.
6. There have been occasions when I took advantage of someone.
7. I'm always willing to admit when I make a mistake.
8. I sometimes try to get even rather than forgive and forget.
9. I am always courteous, even to people who are disagreeable.
10. I have never been irked when people expressed ideas very different from my own.
11. There have been times when I was quite jealous of the good fortune of others.
12. I am sometimes irritated by people who ask favors of me.
13. I have never deliberately said something that hurt someone's feelings.

## Appendix: G

## Vignette

John is a student at your school (with a diagnosis of ADHD/EMR/ASD). His current teacher reports that he often does not follow classroom rules, has trouble completing his schoolwork, and gets upset easily when he does not understand a task. On occasion he has tantrums and damages items in the classroom. Other students often tease John and he does not have many friends. He fidgets and sometimes appears to be in his own world while his teacher is teaching or during conversations with others. He interrupts others when they are talking and seems to talk even when others aren't listening or aren't interested in what he is talking about. John seems to do well with structure and routine, and his behavior get worse when the class schedule is changed.

## VITA

### Education:

- In Progress** *Master of Arts*  
Doctoral Program of Clinical Psychology  
University of Mississippi, University, Mississippi
- May 2004** *Bachelor of Science*  
Psychology, Magna Cum Laude  
Xavier University of Louisiana, New Orleans, Louisiana

### Honors and Awards:

- 2004 Kappa Gamma Pi (National Catholic College Graduate Honor Society)  
2003-2004 Psi-Chi (National Psychology Honor Society)  
2003-2004 Alpha Kappa Mu (National Honor Society)  
2002 Volunteer of the Semester  
2000-2004 Dean's List, Xavier University of Louisiana  
2000-2004 Academic Scholarship, Xavier University of Louisiana

### Membership in Professional Organizations:

- American Psychological Association  
American Association on Intellectual and Developmental Disabilities  
Association for Behavior Analysis  
Mississippi Psychological Association

### Clinical Experience:

- 2009-present** *Behavioral Consultant*  
School Related Internship  
Baptist Children's Village, Water Valley, MS  
As a consultant at Baptist Children's Village (a residential setting for privately placed children as well as children who have state appointed guardians) responsibilities include revising a token economy; group supervision during team meetings; staff training; and keeping records of behaviors in the home.  
Supervisor: Randy Cotton, Ph.D.
- 2007-present** *Education and Research Intern/Research Assistant*  
School Related Internship, Part-time position  
Education and Research, The Baddour Center, Senatobia, MS  
As an intern at the Baddour Center (a private residential facility for adults with mild to moderate intellectual disabilities) responsibilities



include individual therapy; group therapy (grief, roommates, social skills, disability support); staff training; conducting assessments (intellectual, adaptive behavior, medication side-effects, dementia, social skills, functional behavior); developing and implementing behavior plans; and various research projects.  
Supervisor: Shannon L. Hill, Ph.D.

- 2007-2008**      *Clinic Administrative Group Member, Feng Shui*  
Psychological Services Center, The University of Mississippi, MS  
As a group member duties included serving as a liaison with graduate student therapist supervision groups; keeping records of client activity within the clinic; and managing funds to update equipment and décor.  
Supervisor: D. Scotty Hargrove, Ph.D.
- 2006-present**      *Behavioral Consultant*  
Part-time position  
Behavior, Attention, and Developmental Disabilities Consultants, LLC  
Multiple northern counties of Mississippi: Tunica County, Coahoma County, Lafayette County, and Tate County  
As a Behavioral Consultant responsibilities include conducting assessments (full battery, functional behavior, risk assessment); providing teacher and classroom consultations; providing inservices; training individual aids and teachers; monitor ABA/discrete trial programs; social skills training (individual and group); and providing classroom supports for children with developmental disabilities.  
Supervisors: Emily Thomas-Johnson, Ph.D., BCBA-D and Sheila Williamson, Ph.D.
- 2006-2007**      *Behavioral Consultant*  
School Related Internship, Part-time position  
Desoto County School System, Desoto County, MS  
Duties included social skills groups (students with Pervasive Developmental Disorders, ADHD, intellectual disabilities); teacher support; functional behavior assessments; and full battery assessments.  
Supervisor: Sheila Williamson, Ph.D.
- 2006-2007**      *Therapist in Applied Behavior Analysis (ABA)*  
Private residence, Oxford, MS  
Provided in-home ABA therapy for a child with autism.  
Supervisor: Emily Thomas Johnson, Ph.D., BCBA-D
- 2005-present**      *Graduate Student Therapist*  
Psychological Services Center, The University of Mississippi, MS  
Responsibilities include conducting screenings and intake interviews; individual and group therapy; attending weekly supervision meetings and providing and receiving feedback during weekly meetings.

Supervisors: Alan Gross, Ph.D., Kelly Wilson, Ph.D., Thomas Lombardo, Ph.D., and John Young, Ph.D.

- 2005-2006**     *Assistant to Clinical Psychologist*  
Part-time position  
Family Services of North Mississippi (Private Practice), Tupelo, MS  
Duties included conducting comprehensive psychological evaluations with children and adolescents.  
Supervisor: Dr. Priscilla Roth-Wall, PhD.
- 2005-2006**     *Psychology Intern*  
School Related Internship  
North Mississippi Regional Center (NMRC), Oxford, MS  
At an ICF/MR with varying levels of care, responsibilities included providing individual and group counseling services; writing and creating behavior plans; conducting assessments (intellectual, adaptive behavior skills, medication side-effects, dementia); attending psychiatric consults regarding the use of psychotropic medications and assisting individuals with communication devices and social skills.  
Supervisor: Dr. Kimberly Sallis, PhD.
- 2003-2004**     *Intern*  
School Related Internship  
CASA Jefferson, Harvey, LA  
Duties included assisting advocate supervisors with research regarding foster children; typing Case Studies for the agency; and performing office tasks.  
Supervisor: Pat Sylvester, M.S.
- 2002-2003**     *Direct Support Personnel for Residential Respite*  
Part-time position, 2003  
Abraham Lincoln Centre, Chicago, IL  
The Residential Respite division of Abraham Lincoln Centre was a temporary residential placement for children and adolescents with developmental disabilities. Responsibilities as a Direct Support Personnel included assisting and instructing the children with daily living skills; providing recreational therapy; aiding with the use of assistive communication devices; conducting play activities and providing educational tutoring.  
Supervisor: Wanda Barnes, M.S.
- 2001-2003**     *Direct Support Personnel for Family CILA*  
Part-time position, 2001-2003  
Abraham Lincoln Centre, Chicago, IL  
Abraham Lincoln Centre provided a residential facility for individuals

with developmental disabilities. Responsibilities included assisting and providing training for mothers with an intellectual disability with parenting, daily living skills, medication upkeep and administration; providing counseling services and providing educational tutoring. Duties also included developing and implementing a summer camp for the children.

Supervisor: Lyntica Seawood, M.S.

### **Research Experience:**

**2007-present** Education and Research Intern/Research Assistant: The Baddour Center, Senatobia, MS. Under the direction of Shannon Hill, Ph.D.

*Duties:* Designing and implementing research projects; running group interventions; collecting and analyzing data; and presenting findings at conferences.

*Research Areas:* Grief interventions for individuals with intellectual disabilities; peer relationship and social skills interventions between individuals with intellectual disabilities; variables affecting residential service selection for families of individuals with intellectual disabilities; and staff training in behavior analysis.

**2004-present** Research Team Member: The University of Mississippi, University, MS. Under the direction of Alan M. Gross, Ph.D.

*Duties:* Assisting in the design of research projects; providing ideas and feedback for research proposals; assisting with data collection; and designing and implementing individual projects.

### **Teaching/Training Experience:**

**2011-present** Psychology 311: Abnormal Psychology Instructor:  
University of Mississippi, Southaven, MS  
Supervisor: Alan M. Gross, Ph.D.

**2007** Seminar on College Teaching  
University of Mississippi, University, MS  
As part of the course I created a syllabus for a 15 week course in Abnormal Psychology; prepared and delivered an Abnormal Psychology lecture to a small number of students which incorporated learning objectives, active learning techniques, exam questions, and outcome measures; received peer review of the lecture; provided peer review for colleagues' lectures; created a teaching portfolio with a statement of Teaching Philosophy; joined and contributed to the Society for the Teaching of Psychology Listserv; served as a guest lecturer for a colleague's Abnormal Psychology class.  
Supervisor: Kenneth J. Sufka, Ph.D.

**2007-present** Education and Research Intern at The Baddour Center:  
The Baddour Center, Senatobia, MS

As an intern I conducted inservice trainings for staff members on behavior analysis, supporting resident relationships, and facilitating teamwork in both the work environment as well as with residents.

Supervisor: Shannon Hill, Ph.D.

**2006-present** Behavioral Consultant:

Behavioral, Attention, and Developmental Disabilities Consultants, LLC

As a consultant in various school systems I have conducted inservices regarding dealing with challenging behaviors; worked with teachers on following functional behavior plans; and provided individual aids and teachers with training on Applied Behavior Analysis/Discrete Trial Teaching.

Supervisors: Emily Thomas Johnson, Ph.D., BCBA-D and Sheila Williamson, Ph.D.

**2005-2006** Psychology Intern:

North Mississippi Regional Center, Oxford, MS

As an intern I provided Direct Care Workers with state required behavior analysis training.

Supervisor: Kimberly Sallis, Ph.D.

**Presentations at Scholarly Meetings:**

Hamblin, R. J., Johnson, C. N., Slater, R. M., & Young, J. (2010, June). *Teacher perceptions of appropriate mental health practice*. Symposium presented at the 36<sup>th</sup> annual Association for Behavior Analysis International, San Antonio, TX.

Hill, S. L. & Johnson, C. N. (2010, June). *Parental reflections on raising a child with intellectual disability: Advocacy variables*. Poster session presented at the annual meeting of the American Association on Intellectual and Developmental Disabilities, Providence, RI.

Williamson, S., Nassar, S. L., & Johnson, C. (2009, October). Elementary and Middle School Interventions. In E. T. Johnson (Chair), Tutorial: Clinical Strategies within the Classroom for Children with Autism. Symposium presented at the 60th Annual Conference of the Mississippi Psychological Association, Gulfport, MS.

Hill, S. L. & Johnson, C. N. (2009, October). *Advocacy Behaviors of Parents of Adults with Intellectual Disabilities: The Supermom Phenomenon*. Program presented at the 28<sup>th</sup> annual Mississippi Joint Conference on Mental Health and Mental Retardation, Philadelphia, MS.

Durkee, A. O., Johnson, C. N., & Hill, S. L. (2008, November). *The effect of a staff training program on perceived competence and job stress*. Poster session presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Orlando, FL.

Johnson, C. N. & Hill, S. L. (2008, November). *Grief group therapy for adults with Intellectual Disabilities: Process and outcomes*. Paper presented at the annual Mental Health/Mental Retardation joint conference, Philadelphia, MS.

Durkee, A. O. & Johnson, C. N. (2008, November). *Supporting residents through supporting staff: A model for a staff support group with behavior analysis training*. Paper presented at the annual Mental Health/Mental Retardation joint conference, Philadelphia, MS.

Hill, S., Gardner, C., Johnson, C., Surdock, A., & Durkee, A. (2008, May). *Grief group therapy for adults with intellectual disabilities: Process and outcomes*. Poster session presented at the annual meeting of the American Association on Intellectual and Developmental Disabilities, Washington, D.C.

**Publications:**

Hill, S. L., Gardner, C., & Johnson, C. N. (2009). Pilot study of a grief group intervention for people with Intellectual Disabilities: Process and Outcomes. *The NADD Bulletin*, 12, 85-92.

**References:**

Alan M. Gross, Ph.D., Professor and Director of Clinical Training, Department of Psychology, The University of Mississippi, P.O. Box 1848, University, MS 38677. Office: (662) 915-5186; e-mail: pygross@olemiss.edu.

Emily Thomas-Johnson, Ph.D., BCBA-D, Clinical Psychologist; Behavior, Attention, and Developmental Disabilities Consultants, LLC; 4628 Union Road, Sardis, MS 38666. Business: (662) 609-4950; email: etjphd@gmail.com.

Shannon L. Hill, Ph.D., Director, Department of Education and Research, The Baddour Center, P.O. Box 97, Senatobia, MS 38668. Office: (662) 562-0100, ext. 295; e-mail: shill@baddour.org.