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Teacher Stress and Attention Deficit/Hyperactivity Disorder

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Teacher Stress and Attention Deficit/Hyperactivity Disorder

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ABSTRACT

TEACHER STRESS AND ATTENTION DEFICIT/HYPERACTIVITY DISORDER

by Annie Ellis

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There are many factors that can contribute to teacher stress in a primary school classroom. The classroom experience can be examined through various aspects, including the particular types of students that make up the class. Teachers can experience stress at a variety of levels in response to certain situations in their classroom experience, such as the presence of students with suspected and/or diagnosed ADD/ADHD in the classroom. Previous research has argued that teaching these students can be more challenging than when teaching other students. In this study, stress was measured using an altered version of the Perceived Stress Scale. The purpose of the study was to determine the level at which teachers feel stressed in regards students with ADD/ADHD as a result of the three dependent variables, teacher knowledge, classroom logistics, and perceived behavior of children with ADD/ADHD. The data showed that teachers felt low-moderate levels of stress.

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CHAPTER ONE

Introduction

Teaching is a difficult job. Teachers experience very demanding schedules, large amounts of work outside school-hours, and between twenty and thirty children vying for their attention every single day. These factors can lead to teachers feeling overwhelmed, stressed, and frustrated. In fact, Cook (2001) showed that teacher attitudes and frustration levels could affect their quality of teaching, particularly to students in special education classes. Moreover, Sylwester (1994) argued, "emotionally stressful school environments are counterproductive because they can reduce the students' ability to learn" (p. 64). Recently, studies have begun to focus on the relationship between teachers and the students with disabilities that are members of the general education classroom environment (Bahredar, Ghanizadeh, & Moeini, 2006; Greene, Beszterczey, Katzenstein, Park, & Goring, 2002; Sze, S., 2009)

The American Psychiatric Association asserted that between 3%-7% of the school-age population in the United States were diagnosed with ADHD. In "Increasing Prevalence of Parent-Reported Attention-Deficit/Hyperactivity Disorder Among Children --- United States, 2003 and 2007 for the state of Mississippi in 2007," the Centers for Disease Control and Prevention (2010) indicated that 9.9% of children ages 4-17 were diagnosed with ADHD. This showed that the situation in Mississippi was worse than the national average, with perhaps a higher student with ADD/ADHD to teacher ratio. However, it should be noted that exact numbers are hard to estimate because many children with ADHD have not been identified yet (Bos, Schumm, & Vaughn, 2011).

In order to understand some of the correlates of teacher stress, it is important to note that inclusive classrooms were required by three significant pieces of legislation: Public Law 94-142 (Education for All Handicapped Children Act of 1975), the

Americans with Disabilities Act of 1975 (ADA), and the reauthorization of PL 94-142--the Individuals with Disabilities in Education Improvement Act of 2004 (IDEA). IDEA ensured that students with a disability receive "free appropriate public education" (p. 3). These laws applied to students with diagnosed mental handicaps, learning disabilities, and severe disorders. In short, PL 94-142, ADA, and then IDEA required that public education follow certain standards when teaching students with special needs, mainly, if at all possible, they should be included in a general education classroom.

One of the disorders that falls under ADA and that requires constant assistance and accommodations by teachers and schools is Attention Deficit Hyperactivity Disorder (ADHD). Generally classified under OHI (Other Health Impairments), ADHD consists of two main types of behavior: hyperactivity/impulsivity and inattention (Bos, Schumm, and Vaughn, 2011).

With the high rates of children diagnosed with ADHD in the United States, it is likely that teachers have multiple students in the classroom setting with this disorder. Gregg, S., AEL, Inc., & United States (1995) argued that children with ADHD present various challenges in the classroom based on symptoms such as inattentiveness, impulsivity, and distraction.

According to Editorial Projects at the Education Research Center from *Education Week* in 2011, over half of all students with disabilities spent at least 80 percent of their time in the regular (general education) classroom. Greene, Beszterczey, Katzenstein, Park, & Goring (2002) reported that teachers experienced greater stress when interacting with children with ADHD than when interacting with other students in the classroom. Brook, Geva, and Watemberg (2000) found that 43.5% of high school teachers favored

ADHD students receiving instruction in a special education setting rather than in a mainstream education setting. Their study showed that these teachers felt that the mainstream education for pupils with ADHD/Learning Disabilities (LD) caused teachers considerable difficulty (Brook, Geva, & Watemberg, 2000). Greene, Beszterczey, Katzenstein, Park, & Goring (2002) suggested that elementary school teachers rated children with ADHD as "significantly more stressful to teach than their classmates without ADHD" (p.1),

The purpose of this paper is to explore the level at which teacher knowledge, classroom logistics, and the behavior of children with ADD/ADHD contribute to teacher stress in South Mississippi schools.

CHAPTER TWO

Literature Review

Teacher Stress and Knowledge

In the context of exploring teacher stress and the factors that impact it, the term, teacher knowledge, refers to the training and experience the teacher has had, and background information that the teacher had about ADD/ADHD.

Gaining understanding of students' academic development and children's psychological development is an integral step in teacher education programs. When interacting with children with varying cognitive levels and specific needs, a general knowledge of disorders/disabilities along with strategies for accommodating them are thought to alleviate some of the challenges a teacher might face in the classroom. A lack of knowledge and understanding of ADHD, however, seems to be associated with greater challenges experienced by teachers. (Bahredar, Ghanizadeh, & Moeinia, 2006; Brook, Watemburg, & Geva, 2000; Sze, S., 2009)

Understanding children with ADHD should affect teachers' effectiveness in the classroom. In 2006, Bahredar, Ghanizadeh and Moeinia completed a study in Shiraz, Iran entitled, *Knowledge and attitudes towards attention deficit hyperactivity disorder among elementary school teachers*. In the study, 85.7% of the 196 primary school teachers who voluntarily participated in the study self-rated their knowledge of ADHD as "low." Teachers also reported that their main sources of knowledge about ADHD were TV and radio, friends and relatives, periodicals, newspapers, and magazines. However, these are not adequate sources of information. Bahredar, Ghanizadeh, and Moeini (2006) also suggested that there was a strong connection between teachers' attitudes and their level of understanding of the ADHD. They concluded that special courses or lectures about students with ADHD needed to be provided to general classroom teachers. The authors

also argued that because the current rate of awareness of Ritalin (a treatment medication) was low, with only 69.9% of educators recognizing the name, that an increased awareness [of ADHD] could decrease teachers' levels of stress. (Bahredar, Ghanizadeh, & Moeini, 2006)

Brook, Watemberg, and Geva (2000) studied 46 high school teachers in Holon, Israel, to determine teachers' knowledge and attitudes towards pupils with ADHD and learning disabilities. Of the educators, 25 taught at a mainstream school, and 21 taught at a special education institution. The questionnaires included 9 questions about knowledge regarding ADHD. The authors found that the knowledge teachers had was "insufficient" and that their main source of information was specialized literature, courses, and symposium events. The authors argued that "mainstream education for ADHD/LD pupils (with individualized education if necessary) caused considerable difficulty for all [teachers] concerned" (p. 250).

Sze, S. (2009) analyzed literature on pre-service teachers' interactions and attitudes towards students with disabilities. She argued that special education introduction courses in collegiate teacher training benefited teachers in gaining an understanding of students with special needs and increased their comfort levels in interacting with diverse student populations in general education classrooms. This knowledge and awareness of disabilities and the "appropriate teaching strategies" for teachers seemed to have a positive impact on the teachers' experiences. Furthermore, the author asserted that "the success of instructional practice required that general education faculty be prepared to work with students with disabilities," indicating that these introduction courses were a start in building foundations of teacher knowledge and practice (Sze, 2009).

Increasing the level of teacher knowledge about disabilities should positively moderate teacher stress in the classroom.

Teacher Stress and Classroom Logistics

Behind the scenes in every school, teachers have responsibilities that contribute to the logistical side of running a well-structured and highly functional classroom for all students. These school and classroom logistical requirements listed below are significant for those students with ADD/ADHD as they provide an environment focused on increasing student success and enabling the students to be educated with their peers in the general education classroom, instead of excluded in a special education classroom. These logistics include, but are not limited to: school, district, and state teaching requirements, using available resources, preparing and completing paperwork, creating lesson plans, preparing for instruction, managing classroom behaviors, time schedules, and participating in professional development.

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001) studied special education teachers' retention factors and the related stress variables. They surveyed 887 teachers in three major school districts in Arizona, Washington, and Texas. Their results indicated that strong administrative support and professional development were important and positive elements in retention, as teachers needed opportunities to learn. Stress due to the profession was a critical factor in retention as well, and the authors argued that student needs, behaviors, and the conflict between teachers' job perceptions (helping students) and job realities (paperwork, meetings, ranges in student performance levels) contributed to teacher stress (Gersten et al., 2001).

In 2009, Albrecht, Johns, Mounsteven, and Olorunda surveyed 776 Canadian special education instructors. The focus of their study was the working conditions for teachers who were teaching students with diagnosed emotional or behavioral challenges. The survey focused on teachers' risk and resilience factors that influenced teacher retention. The results of the survey showed that 56% of the respondents felt that time available for paperwork was "very poor or poor," and 25% of the participants rated available curriculum materials to be "very poor or poor." The results indicated that as participants selected "very poor or poor" these factors were considered risk factors, and contributed to dissatisfaction in the classroom. (Albrecht, Johns, Mounsteven, & Olorunda, 2009)

Although Albrecht, Johns, Mounsteven, and Olorunda's study was conducted on teachers that specifically taught students with emotional and behavioral disorders, it is likely that teachers who have students with ADD/ADHD in their classroom experience similar difficulties, as all teachers of students with ADD/ADHD are required to develop Individual Education Plan (IEP) paperwork, have little personnel support, and often have inadequate classroom materials leading to an increased stress level.

It is also important to note that special education programs in foreign countries are governed by policies unique to that country, and although provisions are set forth by the United Nations, these policies may differ from those in the United States (Healey, M., 2012).

Presumably, more dissatisfaction in the profession leads to increased frustration and ultimately increased stress. These studies indicate that the tension between teaching (often made more difficult by students with ADHD) and job realities (paperwork and

classroom logistics) were likely to impact and increase the stress and frustration levels in teachers.

Teacher Stress and Children with ADHD/ADD Behavior

Attention Deficit Hyperactivity Disorder (ADHD) is a very controversial disorder (Koch, K., 1999; Mayes, R., Bagwell, C., & Erkulwater, J., 2008). Some doctors and psychologists consider ADHD to be a very debilitating diagnosis for a child because it can affect every segment of a child's life. "Perhaps, most importantly ADHD has a significant impact on children's academic, social, and emotional development," (p.153, 2008). Koch (1999) argued that professionals, mostly of a subdominant view, considered ADHD to be a "made up" disorder caused by misdiagnosis of other health impairments such as lead poisoning or sleep apnea.

Generally speaking, children diagnosed with ADHD are between 4 and 17 years of age (CDC, 2010). Berger and Zieve (2011) did extensive research on causes, symptoms, and treatment methods for ADHD. They found that major causes of ADHD were genetics, disorders such as depression, learning disorders, behavior problems, and closely associated tic disorders. Berger and Zieve (2011) advocated the treatment of ADHD with a combination of medication and behavior therapy with the use of psychostimulant drugs, such as Ritalin, Dexedrine, and Adderall, or the non-stimulant drug, Straterra. Also, Berger and Zieve (2011) argued that the most common symptoms (lack of attention, hyperactivity, and impulsive behavior) of the disorder prove challenging in the classroom environment. Other common symptoms of the disorder that impact the classroom included fidgeting and excessive talking (Koch, 1999). Children

with ADHD exhibit a variety of behaviors in the classroom that seriously disrupted the teaching process and impeded learning. (Whalen, Henker, Collins, Finck, & Dotemoto, 1979; Abikoff, Gittelman-Klein, & Klein, 1977; Zentall, S., 1993). Authors listed behaviors including off-task behavior, motoric restlessness, and intrusive verbalizations, and failure to hold attention during continual tasks or discussion.

Greene, Beszterczey, Katzenstein, Park, & Goring (2002) surveyed 64 elementary school teachers. The research focused on the "subjective level of stress" experienced by a teacher as a result of one particular student, versus "global" causes of teacher stress by many students. Their results indicated an overlap between the frequency of ADHD behavior, as well as severity, and the stress level that the behavior caused the teacher to experience. Teachers experienced greater stress when interacting with children with ADHD than when interacting with other students in the classroom (Greene et al., 2002).

The child with ADD/ADHD's behavior on interaction and education has an effect on the stress levels teachers experienced in the classroom.

CHAPTER THREE

Research Design And Methodology

Introduction

Understanding teacher stress and its causes is extremely important in creating classroom environments in which children of all types can learn--even children that could be considered the "tough" kids, like those with ADHD. If the extent of teacher stress when interacting with these children can be identified and measured, then methods can be created to help teachers cope with stress and maybe indirectly improve the teacher-student relationship. The purpose of this paper is to explore at what level these three factors: teacher knowledge, classroom logistics, and behavior of children (students) with ADD/ADHD, contribute to overall teacher stress in South Mississippi schools.

Briefly, teacher knowledge was based on training, experience, and teacher understanding of the background information of the disorder. Classroom logistics incorporated teacher paperwork, state mandates and regulations that must be followed, available resources, and various classroom features involved in daily activity. Children with ADD/ADHD behavior broadly explored behaviors, diagnostic indicators, and effects of the students on the classroom environment.

Sample

The research participants for the study consisted of South Mississippi public elementary school teachers. The convenient sample was 42 primary school teachers. Teachers were recruited from K-2nd grade schools, Primary School A and Primary School B, in two school districts in South Mississippi. These aforementioned districts are similar in location and have students who interact with each other in the community. The schools are also comparable in Child First Annual Report results by the Mississippi

Department of Education. In 2011, school performance results released by the Mississippi Department of Education rated most schools in these districts as "STAR," "high performing," and "successful," on several areas of qualification.

Procedures

The researcher completed a human subjects' review prior to the study (Appendix C). All participants were provided an overview of the study and their voluntary participation indicated by their completion of the study (Appendix D and E).

The following process recruited participants for the study. First, the researcher contacted the superintendents' offices for each of the school districts selected for the study (Appendix G and H). The researcher sought district approval of the study and support from the principals of each school. The researcher contacted Primary School A and Primary School B and explained the study and its background information to school administrators. After meeting with each principal, the researcher delivered survey packets to the school in individual envelopes for each general education teacher to complete.

Variables

The dependent variable for this study was teacher stress. In their research of teacher stress in 2002, Greene, R.W., Beszterczey, S. K., Katzenstein, T., Park, K., and Goring, J. found that "teacher stress occurs only partially as a function of a student's actual behavior." Therefore, in this study, teacher stress was conceptualized as a multi-dimensional experience in the classroom with children with ADD/ADHD, and examined the following categories in order to further increase understandings of their effects on teacher stress: teacher knowledge, classroom logistics, and the behavior of children with ADD/ADHD on classroom environment.

Scale

Dr. Sheldon Cohen, a professor at Carnagie Mellon University, in conjunction with Tom Karmark and Robin Mermelstein, created a scale to measure stress. The Perceived Stress Scale (PSS) measures the degree to which occurrences in one's life are determined as stressful. (Cohen, S., Karmark, T., and Mermelstein, R., 1983). Permission for academic use is given in the following statement from the website from which the researcher gathered the scale and scoring data: "Permission for use of scales is not necessary when use is for nonprofit academic research or nonprofit educational purposes. For other uses, please contact Ellen Conser at conser@andrew.cmu.edu for instructions" (Conser, E., 2012).

For the purpose of this study, the scale has been adapted to more specifically measure stress in relation to students with ADD/ADHD in the general education classroom. The scale has been validated in several studies; it is used to determine the extent to which participants feel that certain situations in their lives are stressful. Participants were asked to rank, on a Likert-type scale how often they experienced a symptom in the last week. The participant circled a number on an increasing scale of 0 to 4, with 0 meaning that he or she never felt stressed as a result of a situation, and 4 meaning that he or she felt stressed frequently because of the situation. The questionnaire was comprised of 14 questions. The scoring ranges for the 14 items pertaining to students with ADD/ADHD were 0-56. Two questions were added at the end of the second page of the survey that pertained to the "whole class" versus those children with "ADD/ADHD" for comparison purposes, but were scored separately. The total number of questions being

asked was sixteen. These questions (15 and 16) at the end of the survey were scored independently with a range from 0 to 8.

The original Perceived Scale has been altered for use in multiple studies from a 14-item questionnaire, to a 4-item scale and a 10-item scale (Cohen, S., & Williamson, G., 1988; Conser, E., 2012). It has been translated into several languages for academic use, including Spanish and Hungarian (Conser, E., 2012; Remor, E. 2006; Stauder, A. & Konkoly Thege, B., 2006). The reliability and validity for the scale were tested in 1983 on two separate college student samples, and one other sample group. In the first sample, there were 332 respondents from the University of Oregon. The second sample was comprised of 114 freshman psychology students from the same university. The third sample contained 67 subjects. Scores ranged from 6 to 50 in the first sample, 5 to 44 in the second sample, and 7 to 47 in the third sample (Cohen, S., Karmark, T., and Mermelstein, R., 1983).“Coefficient alpha reliability for the PSS was .84, .85, and .86 in each of the three samples” (p.390).

Of the original 14 item questionnaire, most questions were altered slightly for use in this study with a simple phrase added that said, “regarding students with ADD/ADHD.” Several questions had to be more specifically altered in order to measure each three of the variables, classroom logistics, child with ADD/ADHD’s behavior, and teacher knowledge by the addition of language pertaining to each of them. The questions used the same language and format as the original 14 questions. For example, question number one of the PSS-14 originally asked participants: “In the last week, how often have you been upset because of something that happened unexpectedly?” (Cohen, S., Karmark, T., and Mermelstein, R., 1983). In the revised item, question number one was

phrased as: “In the last week, how often have you been upset because of something that happened unexpectedly regarding your students with ADD/ADHD?”

The original questionnaire was designed to gather information about how participants felt over the past month. In order to gain a more accurate description of feelings in this study, the revised scale asked participants to reflect on their views based on the experiences of the past week. Also, the purpose for the study was added to the paragraph of directions at the top of the form. Questions 1, 2, 3, and 5 refer to general stress or general classroom experiences. Questions 6, 9, and 10 correspond specifically to teacher knowledge. Questions 8, 13, and 14 correspond specifically to classroom logistics. Questions 7, 11, and 12 correspond specifically to the perceived Behavior of children with ADD/ADHD. Questions 15 and 16 refer to whole class experiences.

When scoring the altered scale, the researcher followed the scoring procedures for the original 14-question scale for the questions regarding students with ADD/ADHD, coding negative statement responses directly from the scale and reverse coding positive statement responses. The reverse coding process went as follows: a marked score of 0 received a reverse coded score of 4, a marked score of 1 received a reverse coded score of 3, and a marked score of 2 received a reverse coded score of 2. (Figure 1) Questions 1, 2, 3, 4, 8, 12, and 13 were coded directly as marked on the scale as they were negative statements. Questions 5, 6, 7, 9, 10, 11, and 14 were reverse coded, as they were positive statements. The sum of these coded scores was calculated for a “Total ADD/ADHD Score.”

Reverse Code Scores

Scale Marked Score	Reverse Coded Score
0	4
1	3
2	2
3	1
4	0

Figure 1

For the second section that pertained to the whole class versus children with ADD/ADHD, the two items were coded as marked on the questionnaire. For example, a marked score of 2 was coded as a 2. The sum of these two items was calculated for a "Whole Class Total Score."

There are three independent variables in this study: teacher knowledge, school logistics, and child with ADD/ADHD behavior. Each of these independent variables could have an impact on the dependent variable (teacher stress), and therefore the results of the study in varying degrees. Teacher knowledge is the theme that includes experience, level of education (undergraduate, specialization, MDE/PHD, etc.), and certification (elementary education license, alternate route license, special education license, etc.). School logistics covers paperwork, resources available, and classroom demographics among other things. Lastly, ADD/ADHD behavior involves the behaviors, challenges, and the impact these unique students have on teacher stress. Grouping the corresponding

questions and collecting a mean score for the group of items quantified each of these variables.

Demographic information was gathered in order to gain insight about the study participants' school experiences. These variables included: school, teacher certification, grade taught, number of students in class, estimated number of children suspected and/or diagnosed with ADD/ADHD in the classroom, estimated number of minutes spend performing paperwork tasks each day, and number of students receiving specialized services outside of the general education classroom (excluding speech/language services).

Data Analysis

The data collected was entered into an IBM SPSS predictive analytics software scoring system and quantitative analyses were performed. The reliability of the altered scale used for the study was measured using a Cronbach's Alpha. The internal consistency of the PSS-14 for Teacher Stress and ADD/ADHD was .88 for the convenient sample. (Figure 2)

PSS-14 ADD/ADHD

Whole Scale

Reliability Statistics

Cronbach's Alpha	N of Items
.888	14

Figure 2

Reliability could not be measured for the last two researcher-created "Whole Class" questions because of the limited number of items. Reliability statistical analysis required at least three items. Therefore, the researcher ran correlation analysis to measure the relationship between responses of the two sections. Analysis showed a significant

negative correlation between “TotalADHDScore “ (scores for the first 14 items) and “TotalWholeClassScore” (scores for the last two items), r(39)=.354, p =.034. (Figure 3)

Correlations

		TotalADHDScore	TotalWholeClassScore
TotalADHDScore	Pearson Correlation	1	-.354*
	Sig. (2-tailed)		.034
	N	37	36
TotalWholeClassScore	Pearson Correlation	-.354*	1
	Sig. (2-tailed)	.034	
	N	36	41

*. Correlation is significant at the 0.05 level (2-tailed).

Figure 3

Before data analysis, all items were given a qualitative label, as a summary of the item content for use in discussion and graphic representation of results. The labels are below. (Figure 4)

PSS 14+2 Labels for SPSS Analysis

Item Number	Label
1	Unexpectedness
2	Importance
3	Nervousness
4	Day to Day Behavior
5	Teaching Strategies
6	Ability and Knowledge
7	Effectiveness
8	Ability to Cope
9	Training and Preparation
10	Day to Day Learning
11	Attention
12	Outside Frustrations
13	Paperwork
14	Instructional Management
15	Whole Class Effectiveness
16	Whole Class Instruction

Figure 4

For analysis purposes, all qualitative demographic variables were given quantitative labels and categories where necessary. Teachers reported Grade Level by circling or filling in the grade taught, either K (for Kindergarten), 1 (for first grade), or 2 (for second grade). These responses were labeled as follows: Kindergarten received a

label of “0,” first grade received a label of “1,” and second received a label of “2.” Teachers indicated their knowledge level by reporting their Certification in a variety of ways, ranging between licensure (A, AA, etc.), additional accreditation (National Board Certified Teacher), and degree level and subject (Bachelor’s degree in Elementary Education, Master’s degree in English, etc.). Responses were placed into four numeric categories. A Bachelor’s degree or “Class A” license received a label of “1.” A Bachelor’s degree or “Class A” license with National Board Certified Teacher (NBCT) indication received a label of “2.” A Master’s degree or “Class AA” license received a label of “3.” A Master’s degree or “Class AA” license with NBCT indication received a label of “4.”

Teachers reported the estimated amounts of students who were suspected, diagnosed, or both in their classrooms, and they were categorized as follows: classrooms with only suspected ADD/ADHD diagnoses were given a “1” label, classrooms with only confirmed ADD/ADHD diagnoses were given a “2” label, and classrooms with both suspected and confirmed ADD/ADHD diagnoses were given a “3” label. The amount of Estimated Minutes of Paperwork that teachers reported was categorized into time segments and given numerical labels. Any number of minutes reported ranging from 0-14 was placed into category “1.” Any number of minutes reported ranging from 15-39 was placed in category “2.” Any number of minutes reported ranging from 40-59 was placed in category “3.” Finally, any number of minutes reported ranging from 60-120 was placed in category “4.”

CHAPTER FOUR

Analysis of Data

Introduction

The purpose of this study was to determine at what level of stress teachers in South Mississippi schools experience as a result of teacher knowledge, classroom logistics, and the perceived behavior of students with ADD/ADHD in the classroom.

The research question mainly focuses on stress levels, and how different classroom experiences with students with ADD/ADHD, in relation to demographic variables, increase or decrease those levels. The study was conducted to see how stressed teachers felt, and how this could possibly relate to their teaching experience with the whole class, that is, providing for all students in the class including those suspected and/or diagnosed with Attention Deficit/Hyperactivity Disorder.

Numerous quantitative analyses of the data were performed to provide meaningful insight into the responses of 42 teachers in two South Mississippi primary schools. Questionnaires were scored by hand and analyses were run on computer-based IBM SPSS software. After identifying information and demographic information were removed from the questionnaires, each set was given a survey number for confidentiality reporting purposes.

Statistical Data Analysis

Tables 1 and 2 show gathered data for each survey, organized in numerical order by a randomly assigned survey number. Four surveys were incomplete, but were still able to be analyzed depending on the level of completion in the specific area selected by the researcher to be computed by SPSS. A score of "N/A" indicates that the participant either did not respond to that question, did not provide a clear response, or selected one or more response options. As shown below, the highest total score for the PSS-14 Section, also

referred to in this paper as “TotalADHDScore,” was 34 (of a possible 56), and the lowest total score was 2. The highest total score for the PSS+2 Section, referred to in this paper as “TotalWholeClassScore,” was 8 (of a possible 8) and the lowest total score was 2.

Table 1

PSS-14 Section of Survey Scored w/Reverse Scores
Incomplete/Unscorable Surveys: 27, 34, 41, 42

Survey #	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Total
1	3	3	4	0	2	0	0	4	3	2	2	3	4	2	32
2	4	2	4	2	2	2	2	2	0	1	2	2	2	1	28
3	2	1	4	0	1	0	0	0	2	0	2	2	0	2	16
4	1	1	2	1	2	2	1	1	2	0	1	0	0	3	17
5	0	0	0	2	2	1	0	0	3	1	1	0	0	1	11
6	2	2	3	0	0	0	0	0	1	1	1	1	0	1	12
7	4	2	4	2	1	2	2	4	2	2	3	3	2	1	34
8	2	1	1	2	1	2	2	0	1	0	2	1	2	2	19
9	2	2	3	1	2	1	1	1	2	2	2	2	2	2	25
10	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
11	0	1	2	1	1	2	1	1	2	1	1	1	0	2	16
12	2	2	2	2	2	2	2	2	2	2	2	2	2	2	28
13	0	0	3	0	0	0	0	0	0	0	1	0	0	1	5
14	1	0	3	1	1	0	1	0	0	1	1	1	0	1	11
15	2	4	3	1	2	1	1	3	2	2	3	2	2	1	29
16	2	3	2	0	1	1	1	0	4	0	1	4	2	1	22
17	3	2	4	2	1	1	2	2	0	1	2	2	3	1	26
18	4	4	4	2	2	1	2	2	2	1	1	4	3	2	34
19	3	2	3	2	2	2	2	2	2	2	2	3	2	2	31
20	2	2	1	1	2	2	1	1	2	1	1	3	0	1	20
21	3	3	2	1	1	2	2	2	3	2	2	1	2	3	29
22	3	2	3	1	1	2	1	1	2	1	2	2	2	0	23
23	2	3	3	1	2	3	2	2	3	1	1	3	4	2	32
24	2	2	3	2	2	1	1	2	1	2	2	0	2	1	23
25	4	3	4	1	2	1	3	2	1	1	2	4	3	3	34
26	1	2	1	0	0	0	0	0	1	1	1	1	1	1	10
27	2	3	2	1	2	1	2	2	0	1	N/A	2	3	2	N/A
28	3	3	2	2	2	2	2	2	1	2	2	3	1	1	28
29	2	1	3	0	0	0	0	0	0	0	0	1	2	0	9
30	2	1	2	1	1	2	1	1	2	1	1	1	0	1	17
31	1	1	3	1	1	1	2	0	2	1	1	3	0	1	18
32	2	3	2	1	2	2	2	1	2	2	2	1	2	2	26
33	2	2	2	2	2	2	2	2	3	2	N/A	4	3	3	N/A
34	2	2	3	2	2	2	2	1	2	2	2	3	2	2	29
35	2	0	0	1	1	1	1	2	2	1	1	3	1	0	16
36	2	2	2	2	2	2	2	2	2	2	2	2	2	2	28
37	0	0	2	1	1	1	1	1	1	1	1	2	1	1	14
38	2	2	2	1	1	1	2	1	3	1	2	4	2	2	26
39	0	0	2	1	0	0	0	4	1	0	1	2	1	1	13
40	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
41	4	4	4	2	2	2	2	2	3	N/A	4	2	2	2	N/A

Table 2

PSS+2 Section Scored and Totaled
Incomplete Survey: 34

Survey #	Q15	Q16	Total
1	2	2	4
2	3	3	6
3	4	4	8
4	3	4	7
5	3	3	6
6	3	3	6
7	2	2	4
8	3	3	6
9	2	2	4
10	4	4	8
11	2	3	5
12	3	3	6
13	3	3	6
14	3	3	6
15	3	3	6
16	4	4	8
17	3	3	6
18	2	2	4
19	3	3	6
20	3	2	5
21	1	2	3
22	4	4	8
23	3	3	6
24	3	3	6
25	1	2	3
26	4	4	8
27	2	2	4
28	3	3	6
29	2	3	5
30	3	3	6
31	2	3	5
32	2	3	5
33	2	3	5
34	NA	N/A	N/A
35	2	2	4
36	3	4	7
37	2	2	4
38	4	4	8
39	3	3	6
40	4	4	8
41	3	3	6
42	1	1	2

The amount of valid scores that could be used in determining the "TotalADHDScore" for each participant was 37. The mean score was 21.43 (N=37). Normal distribution of the frequency of scores fell along a bell curve with a Standard Deviation of 8.704. (Figures 6 & 7)

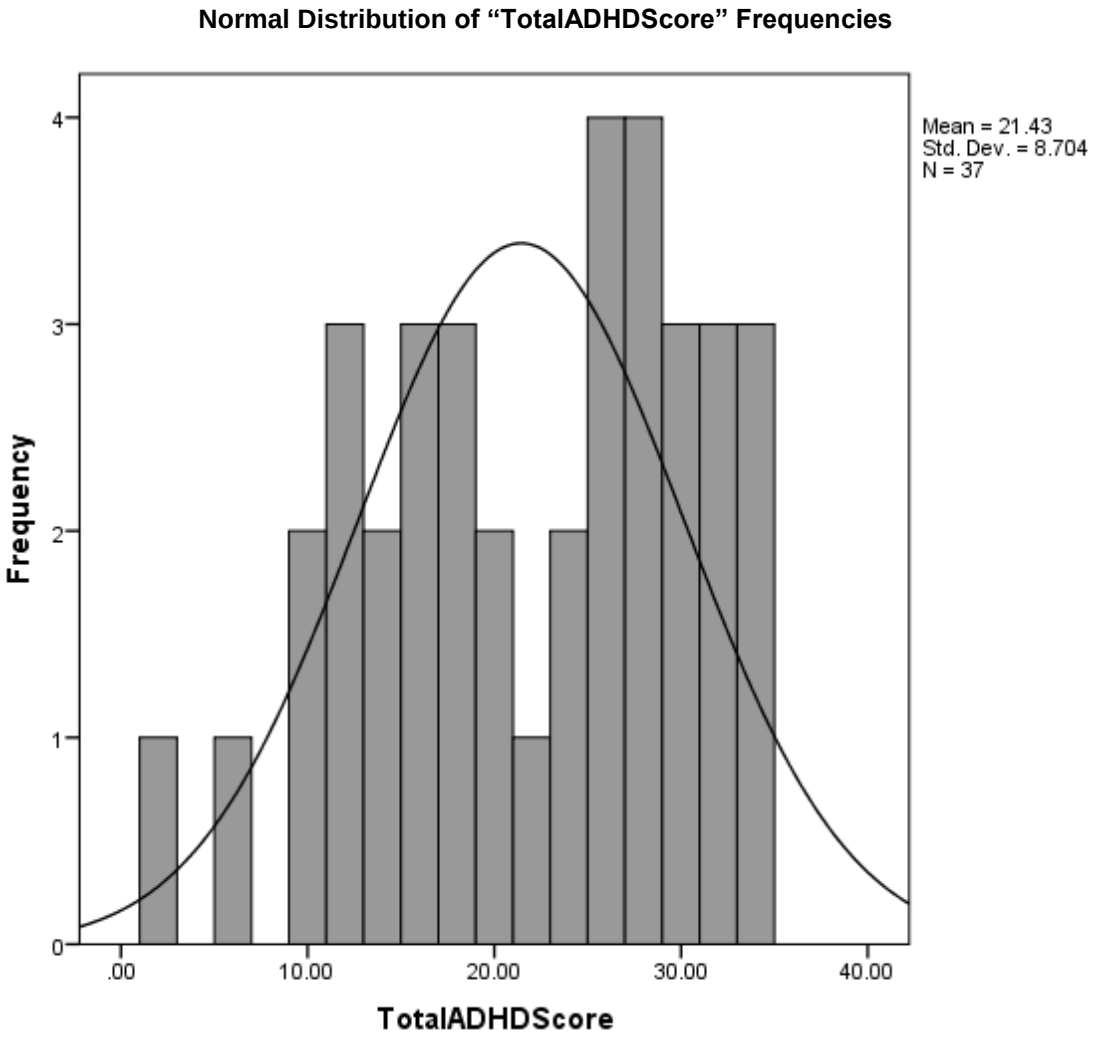


Figure 5

Descriptive Statistics

	N	Minimum	Maximum	Mean	Standard Deviation
TotalADHDScore	37	2.00	34.00	21.4324	8.70358
Valid N (list wise)	37				

Figure 6

In the range of possible scores from 0-56 from the PSS-14 Scale, the researcher determined levels of stress based on equal division of possible scores in 14-point increments. (Figure 8)

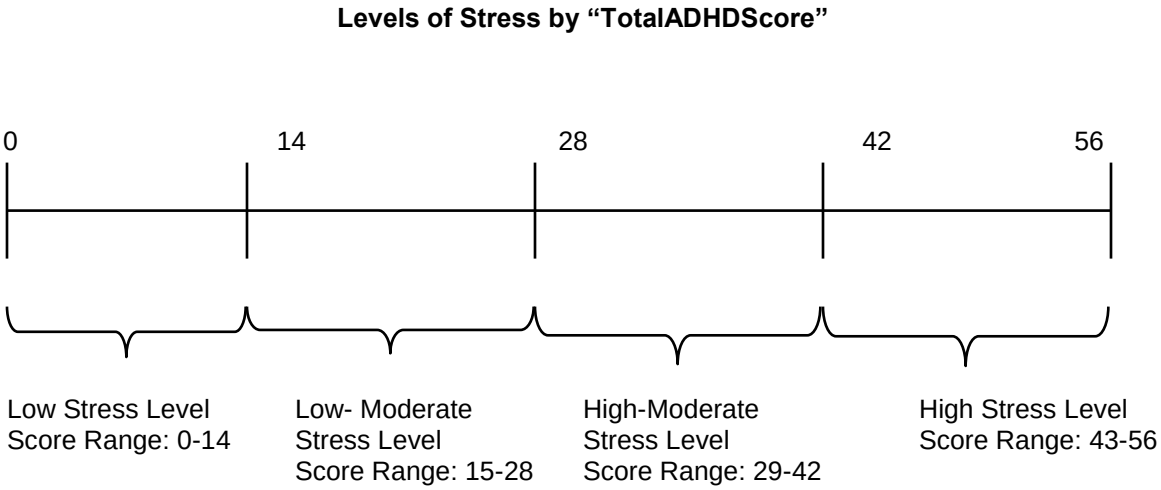


Figure 7

The breakdown of data results for PSS-14 "TotalADHDScore" (N=37) was as follows: 24.32 % of teachers scored in the low range (from 0-14), indicating a low level of stress. 51.35% of teachers scored in the low-moderate range (15-28), indicating a low-moderate level of stress. 24.32% of teachers scored in the high-moderate range (29-42), indicating a high-moderate level of stress. 0.00% of teachers scored in the high range (43-56), indicating a high level of stress.

The data showed that the majority of teachers, at 51.35% of participants with valid survey results, experienced a low-moderate stress level as a result of students with ADD/ADHD in their classrooms, in relation to knowledge, classroom logistics, and

behavior associated with children with ADD/ADHD. The average score of 21.32 fell almost exactly at the midpoint of the low-moderate score range, and further supported the data conclusion (M=21.32).

Data collected from the PSS+2 Section items that were totaled for a nominal score, "TotalWholeClassScore, " were then converted to a percentage of the highest possible score, to indicate how often they felt that they met the needs of the whole class in effectiveness and instruction. Of 41 valid surveys, teachers reported an average combined score of 5.66 (on a scale of 0-8), indicating that they felt that they met the needs of the whole class 70.73 % of the time, or somewhat close to "Fairly Often" (N=41, M=5.66) on the scale below. (Figure 9)

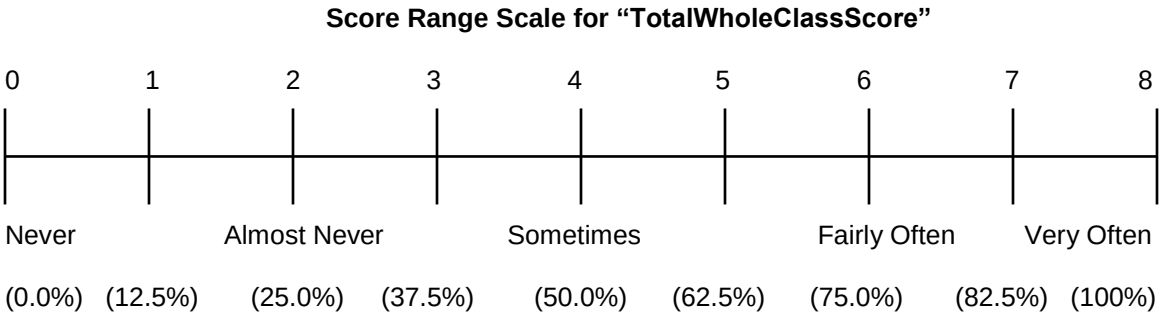


Figure 9

Summary of Additional Findings from Data Analysis

The means of "TotalADHDScores" were analyzed in relation to demographic variables of school, grade level, knowledge level, estimated minutes spent doing paperwork, and make up of class with either suspected, diagnosed, or both students with ADD/ADHD. Bar graphs compiled to further explain the data are located in Appendix H of this paper.

Data showed that stress levels of teachers at School B were higher on average than those of teachers at School A. (Appendix H, Graph 1) In addition, stress levels of teachers were higher overall in first grade than in Kindergarten or second grade, however not by a significant amount. (Appendix H, Graph 2)

Lowest average stress levels were found with teachers who reported a Master's Degree level of education or "Class AA" teaching license *and* National Board Certification. Highest average stress levels were found with teachers who reported a Bachelor's degree level of education or " Class A" teaching license. (Appendix H, Graph 3)

Participants with both suspected and diagnosed students with ADD/ADHD had the highest average stress levels, compared to participants who reported only suspected students or only diagnosed students. (Appendix H, Graph 4)

Participants who reported completing an estimated amount of 40-59 minutes of paperwork per day shows the highest average levels of stress, however those who reported completing 60-120 estimated minutes per day scored the lowest in average stress levels by a significant amount. (Appendix H, Graph 5)

Subscale Data Summary

Each independent variable (general stress, behavior stress, logistics stress, and knowledge stress) was assigned a representative independent variable to be measured in relation to responses compiled from the questions in that specific subscale. The data showed that the means of scores were highest for questions relating to general stress, and gradually declined with those relating to behavior stress, logistics stress, and knowledge

stress, respectively regarding students suspected and/or diagnosed with ADD/ADHD. (Appendix A, Graph 6) Several pieces of significant data results are included below.

The means of teachers' responses to questions relating to general stresses were highest from those who taught first grade, and lowest (by a significant amount) from those two taught second grade. (Appendix A, Graph 7)

The independent variable, estimated minutes of paperwork, was used to analyze teachers' levels of stress as a result of classroom logistics. Stress levels increased as the amount of paperwork increased, until teachers reached the 60-120-minutes per week estimation, where the mean of the stress levels decreased by almost half. (Appendix A, Graph 8)

Participants who indicated a Bachelors Degree or "A" license as their certification level reported highest levels of stress as a factor of their knowledge level. (Appendix A, Graph 9)

CHAPTER FIVE

Discussion

Summary of the Study

42 teachers from two public primary schools in South Mississippi participated in the study. Participants taught either Kindergarten, 1st, or 2nd grade. In the early fall, the researcher approached school districts and principals in both districts and made requests for their teachers to participate in the study. After both districts approved participation, the teachers from two primary schools voluntarily and anonymously filled out surveys in November and December of 2012. The data was compiled and analyzed in the spring of 2013. The participants filled out an altered version of Dr. Sheldon Cohen's "Perceived Stress Scale," that was not only used to measure stress, but more specifically to measure teacher stress as a result of students with suspected and/or ADD/ADHD being present in the classroom.

Three variables were considered possible contributing factors to this stress, and were measured using subgroups of preselected questions throughout the survey. They were teacher knowledge, classroom logistics, and behavior of children (students) with ADD/ADHD. Demographic characteristics about classroom count, grade taught, teacher certification/education level, estimated minutes completing paperwork, and estimated numbers of students who were suspected and/or diagnosed were all compiled as possible independent variables to be analyzed in relation to the average levels of teacher stress.

They survey consisted of two sections. The first section was the altered PSS-14, and contained questions that applied to experiences with students with ADD/ADHD. The second section, referred to as the PSS+2, contained two questions that were scored completely separate from the first two, as they pertained to teachers' perceived

effectiveness and instructional skills for the whole class, including those with ADD/ADHD. After data was collected, the researcher scored items on the PSS-14 a consistent coding method for both positively and negatively phrased statements. Positive statements were reverse scored. Item scores were totaled for a "TotalADHDScore." The following two items were totaled directly from the participant's response, no reverse scoring necessary. These items were totaled for "WholeClassScore," the qualitative labels added for clarity in analysis and explanation of results. All scores were integrated into an SPSS analysis program.

Summary of the Findings

Data showed that the majority of teachers felt stressed at a low-moderate level as a result of their teacher knowledge, classroom logistics, and behavior of students with suspected and/ or diagnosed ADD/ADHD in their classrooms. There was a significant negative correlation between the levels of teacher stress in relation to these children and how often the teachers felt that they were meeting the needs of their whole class, indicating that as "TotalADHDScore" levels went up, "WholeClassScore" totals went down, and vice versa. Scores were highest on questions about "general stress," and declined in questions specifically relating to the following independent variables in this order: behavior of children with ADD/ADHD, classroom logistics, and teacher knowledge. This indicates that teachers had higher stress levels as a result of specific behaviors, than logistical factors or their knowledge levels.

The data showed that teachers who indicated only a Bachelors Degree or "Class A" license had higher stress levels, on average, than those who indicated a Masters Degree or were National Board Certified Teachers. Stress levels were also highest in classrooms

with both students who were suspected and diagnosed with ADD/ADHD, verses classrooms with only students who were suspected or diagnosed. Participants' stress levels increased with the amount of time spent completing paperwork each day, with the highest stress levels occurring with teachers who reported estimations between 40 and 59 minutes. However, teachers who reported spending between 60 and 120 minutes had significantly decreased average stress levels. Teachers who taught first grade had the highest stress levels. Participants from Primary School A had significantly lower stress levels in comparison to Primary School B.

Discussion of the Findings

The results of this study are actually quite surprising, and quite dissimilar to the expected results. Varied experiences in the school environment and prior research led the researcher to believe that these students are challenging and could greatly impact teacher's stress levels, causing teachers to report moderate to high levels of stress. However, the data showed that over half of teachers reported feeling a low-moderate level of stress. This causes concern over the disparity between rhetoric in the education field and the actual data presented in this paper, leading the researcher to question why high levels of frustration and are expressed, yet low-moderate levels of stress are reported. Zero participants in the study even came close to scoring their feelings in a way that would indicate that they experience a high level of stress because of the presence of these children in their classrooms.

The data also showed that the independent variables of teacher knowledge, classroom logistics, and behavior of children with ADD/ADHD, impacted the levels of stress in different ways. Stress levels caused by behavior of the students were higher than

stress levels caused by classroom logistics or teacher knowledge. This can lead the researcher to reasonably assume that of the three, the biggest impact, or problem in the classroom, is the type of behaviors caused by the disorder. These behaviors, as argued by Berger and Zieve (2011), include the inability to pay attention, impulsivity, and hyperactivity. A reason for this could be that these behaviors would be more stressful because they can have a direct affect on the teacher's ability to instruct the class effectively due to their constant need for attention, supervision, and reminders to stay on task. If the teacher's attention is consistently drawn away from other students in the class in order to reprimand or give attention to a student with ADD/ADHD, it is reasonable to assume that the teacher may feel flustered and that he or she is not providing the appropriate attention to instruction or students, causing the teacher's stress level to rise.

When considering the impact that teacher knowledge had on stress levels with students with ADD/ADHD in the classroom, it is interesting to note the gradual decline in average stress levels as higher levels of qualifications were reported. The demographic factor of "Certification" was asked as an open-ended question for which teachers could provide what they perceived their level to be. Due to the variation of qualitative answers, the results had to be quantified, and data organized into a manageable, measurable way. Teachers who reported the highest stress were those who reported only a Bachelors Degree or "Class A" teaching license. The second highest average levels were with teachers who reported only a Masters Degree or "Class AA" teaching license. The second lowest average scores were with teachers who reported a Bachelor's Degree or "Class A" license and National Board Certification. The lowest average scores were with teachers

who reported a Masters Degree or "Class AA" license and held National Board Certification.

As a result of the data shown, it can be assumed that the higher level of education and certification a teacher has, the lower levels of stress, on average, the teacher is going to experience. It is reasonable to assume that an explanation for this outcome is that the more teachers understand various methods of best practice instruction and how to best teach these students, and can prove it in order to receive distinction as a NBCT, the less stressful it is to do so. This data supports an understanding that teachers must be lifelong learners, and continue to grow their own knowledge in order to have a better experience with less stress in the classroom.

One of the most interesting pieces of data procured from this research was that on the relationship between teachers' stress levels and the amount of minutes that they estimated doing paperwork each day, as a function of routine logistical factors of a classroom. The gradual increase in average stress levels, as estimated time spent increased was not surprising; however, the dramatic decrease in those levels from the 49-50 minute category to the 60-120 minute category is significant to explore. Perhaps once the teachers have committed such a significant amount of time to completing paperwork that they feel less stressed because they are fully prepared and do not lag behind deadlines or feel overwhelmed by remaining piles of work to do. From the data reported by teachers, it is logical to assume that at least an estimated 60 minutes per day is the amount of time necessary for teachers to commit in order to significantly decrease their feelings of stress.

The differences shown in stress levels pertaining to class make up of students who

were only suspected, only diagnosed, or both suspected and diagnosed tell the researcher that the different situations in the classroom environment yielded different levels of stress for teachers. Those who had students who were both suspected and diagnosed with ADD/ADHD had the highest average levels of stress. Teachers who only had students who were diagnosed had the lowest scores. This situation could realistically be explained with the assumption that students who are diagnosed are receiving an intervention of some kind (whether it be medication or a classroom accommodation) that is enabling this child to cope with behaviors and have less of an impact on the teacher's stress level. Another explanation could be that if the teacher has several children who are diagnosed and exhibit those normal behaviors, that the teacher is more apt to recognize those behaviors in those students, yet those students may not have a way to control those behaviors or cope with them because they have not yet been diagnosed, further increasing the stress level of the teacher.

Although the data showed only marginally higher stress levels, on average, with first grade teachers in comparison to Kindergarten and second grad teachers, this could possibly result from the ages of the students, structure of the classroom at that age level, or other factors significant to that specific grade level.

The clear gap between the mean stress levels of Primary School A and Primary School B incites a considerable need for discussion as to why teachers at one school had much lower stress levels than teachers at the other. The data presented allows the researcher to assume that teacher knowledge, classroom logistics, and behavior of the students with ADD/ADHD are all contributing factors to higher levels of stress at Primary School B than Primary School A. One explanation is that there are other factors

not examined in this study that led to this difference. Another consideration is that perhaps only teachers concerned about this issue chose to participate at Primary School B, causing results to be skewed towards the higher end of the stress level scale.

Implications

Though responders did not express high levels of stress pertaining to students with ADD/ADHD, the study can still have implications on analysis of the different situations in a classroom environment that could cause a teacher to feel stressed or impact their performance due to stress in regards to these students. The purpose was to find out at what level teachers were stressed because teacher knowledge, classroom logistics, and behavior of or relating to students with suspected and/or diagnosed ADD/ADHD in the South Mississippi classroom. The study did in fact provide data to support a conclusion that teachers felt stressed at a low-moderate level. Therefore, the study provided a reasonable measure of these stress levels.

Limitations

While several pieces of significant information have been found through this study, there are several limitations that should be considered when synthesizing the data. Although found to be highly reliable, the scale was altered from it's original form to more specifically provide the type of information that the researcher was seeking as the purpose of the study. During this alteration process and subsequent transfer to printed form, a slight deviation occurred in the wording of two labels on the first page of the survey on the Likert-type scale. The numerical values stayed the same, as did the label formatting on the second page. However, the terms "almost" and "fairly" were incorrectly formatted one and two spaces, respectively, from where they were intended

and placed by the original scale. Many teachers caught this slight change and noted it before continuing the survey, though it can be assumed that others did not. The formatting error was not noted until after all data had been collected. This error could possibly cause a decrease in the validity of the study, though no responses were greatly skewed as a result.

The weight of the correlation between average total responses of the PSS-14 section and PSS+2 section of the survey could be greatly increased, had the researcher asked more questions or used the same scale in its entirety in relation to the whole class, not just pertaining to students with ADD/ADHD. Since only two items were included, reliability could not be measured for the items to substantially establish the item responses as reliable data.

The number of participants from Primary School B was much lower than the number of responses from Primary School A, as the survey was completely voluntary. This could have had a possible cause of the significant disparity in average stress levels shown between the two schools, therefore limiting the impact of the results of the study.

Recommendations for Future Research

It would be valuable for future researchers to explore the possibilities of interventions or changes that could be made to the classroom environment in order to lesson the stress levels of teachers in regards to students with ADD/ADHD. Since the data showed that stress levels caused by behavior are higher than those of classroom logistics and teacher knowledge, it is important to delve into ways that this factor can be better addressed, or which specific behavioral strategies or interventions could be most successful in reducing this impact on classroom teachers.

Researchers should also consider surveying teachers on all grade levels. Due to time restraints and responses from considered schools, only primary school teachers (K-2) were willing and able to participate in the study. The data gathered is significant, and would be quite interesting to compare to future data from teachers of older children, to see if their levels of stress are comparable or not, simply based on the grade level of students.

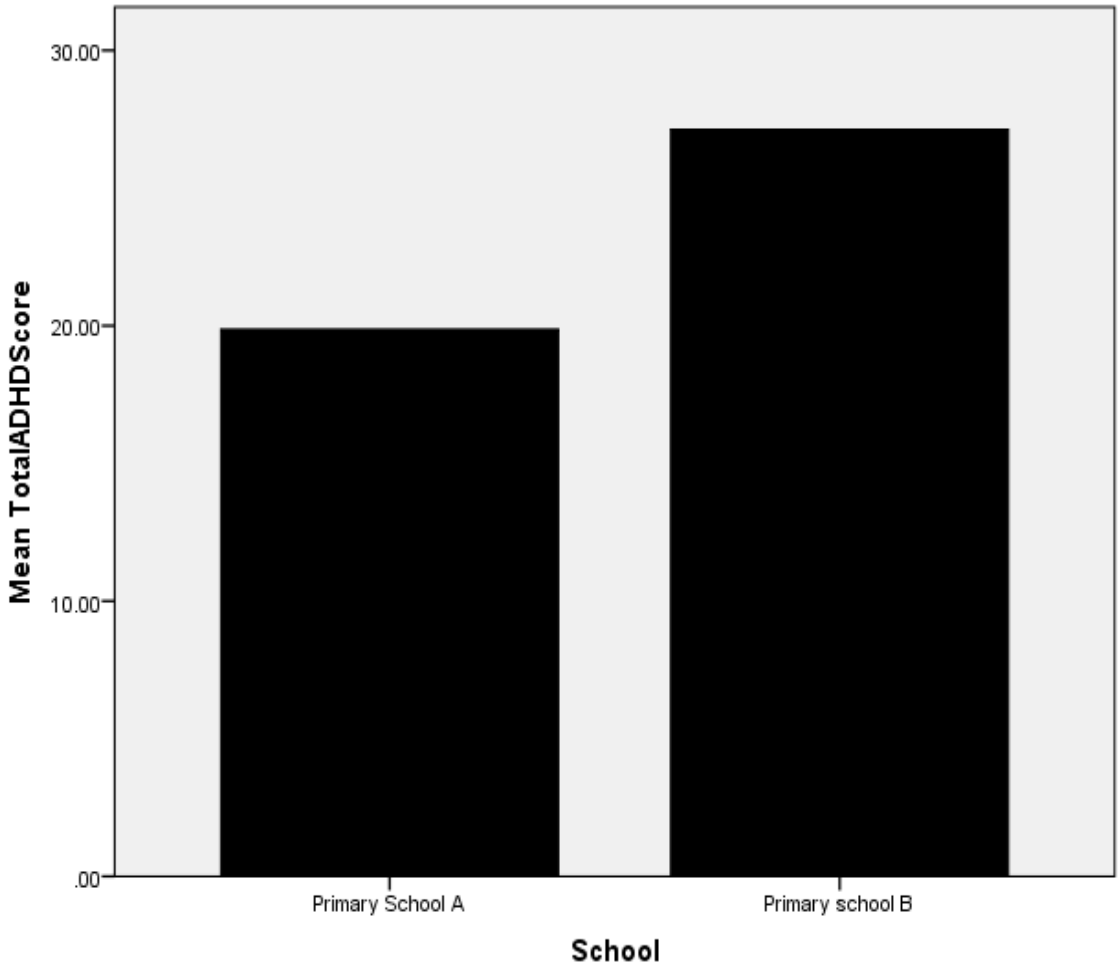
More research in general is suggested for the purpose of helping educators increase their depth of knowledge on the impacts that students with ADD/ADHD have on the classroom environment and on their teachers. The more that is known about this topic can only benefit both teachers *and* the students they teach.

Conclusion

Teacher stress in the classroom has been a topic of discussion for research over the past few years. Sylwester (1994) argued, "emotionally stressful school environments are counterproductive because they can reduce the students' ability to learn" (p. 64). Although understandings of the effects of teacher stress have been often discussed, research on specific causes of this stress has been in need of further exploration. As Greene, Beszterczey, Katzenstein, Park, & Goring (2002) suggested that elementary school teachers rated children with ADHD as "significantly more stressful to teach than their classmates without ADHD" (p.1), research on the actual level of stress these students caused teachers became a significant point of inquiry for the researcher, and the foundation for this paper. Teacher stress cannot be simplified into an experience of only one cause, and therefore was explored in this study as a conceptual blending of teacher knowledge, classroom logistics, and behavior of students with ADD/ADHD. The study

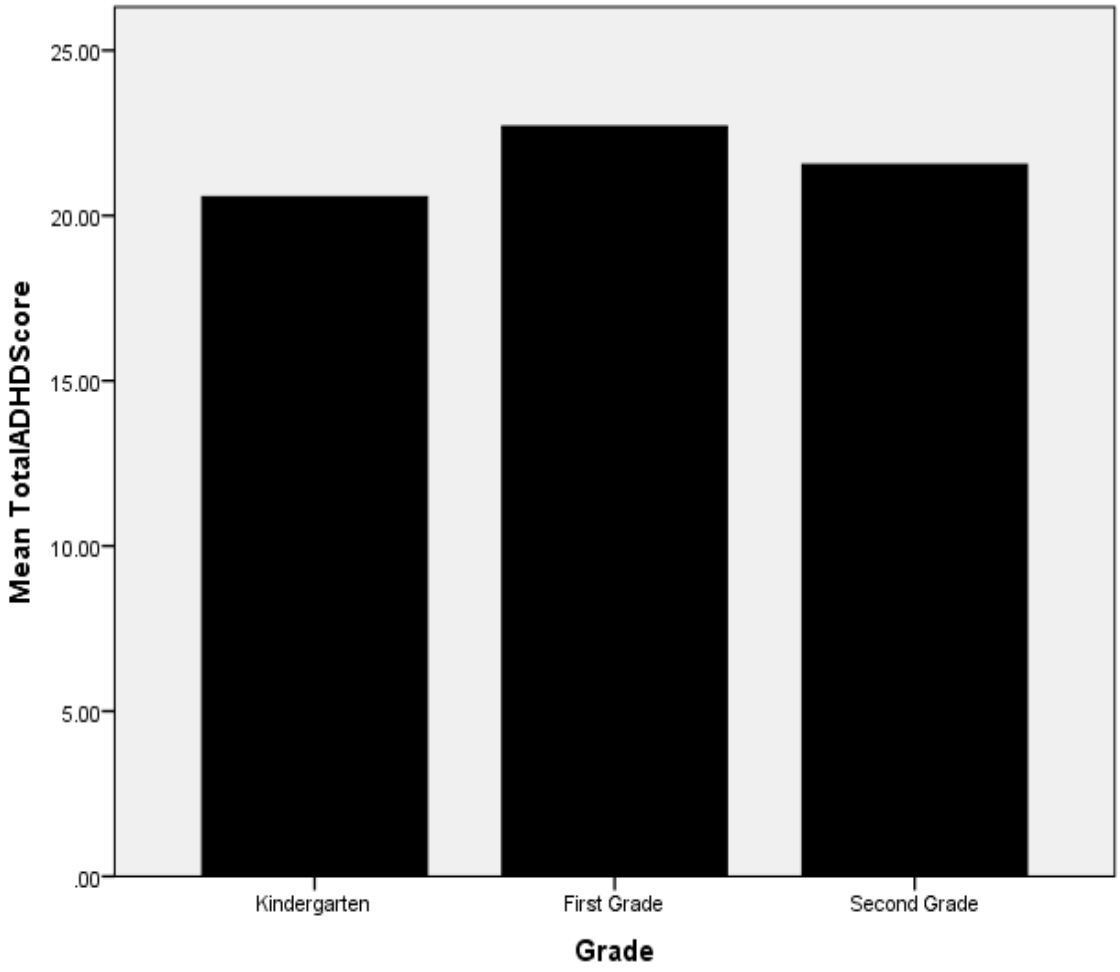
was conducted using a survey instrument that measured how stressed teachers felt in regards to different specific situations pertaining to students with ADD/ADHD. Data resulting from the survey showed that the majority of teachers felt stressed at a low-moderate level as a result of the of their teacher knowledge, classroom logistics, and the behavior of students with suspected and/or diagnosed ADD/ADHD.

Appendix A



Graph 1

Appendix A



Graph 2

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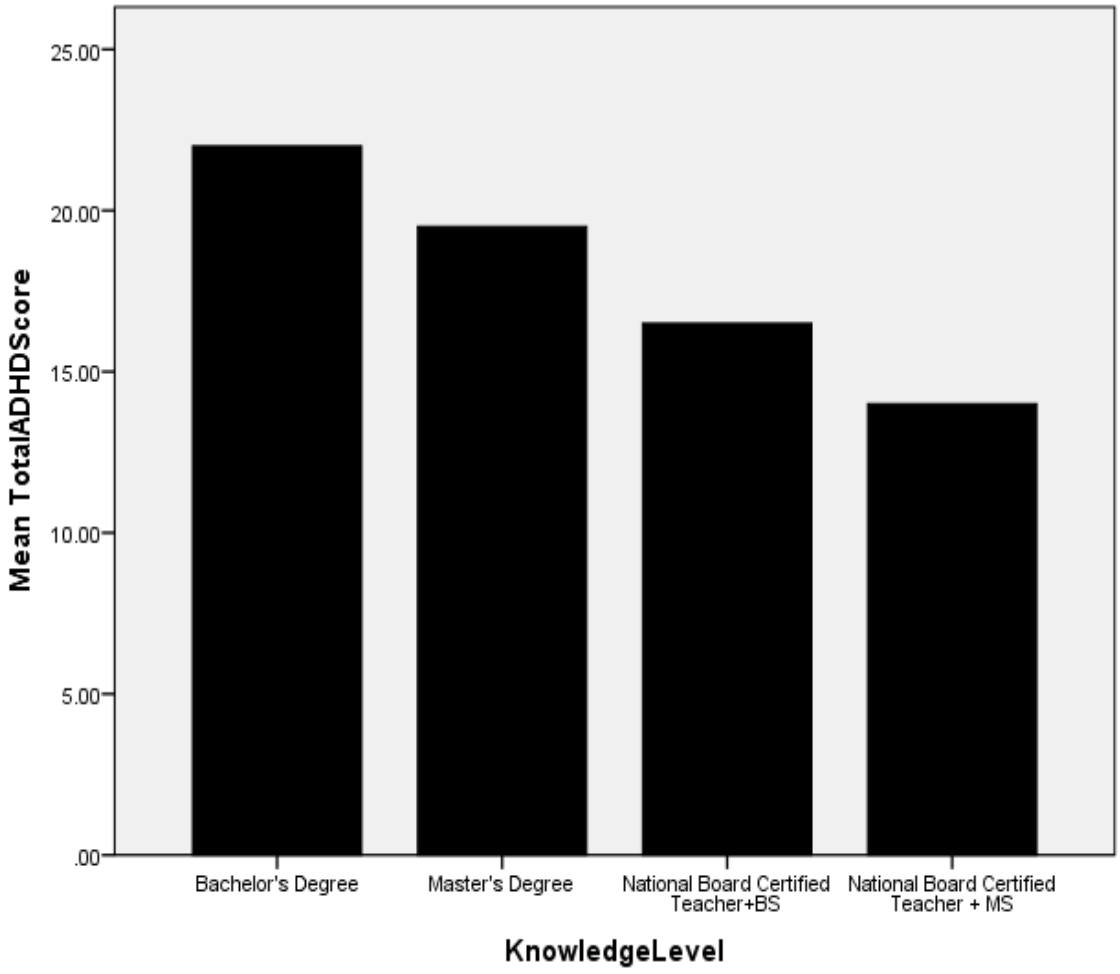

Graph 3

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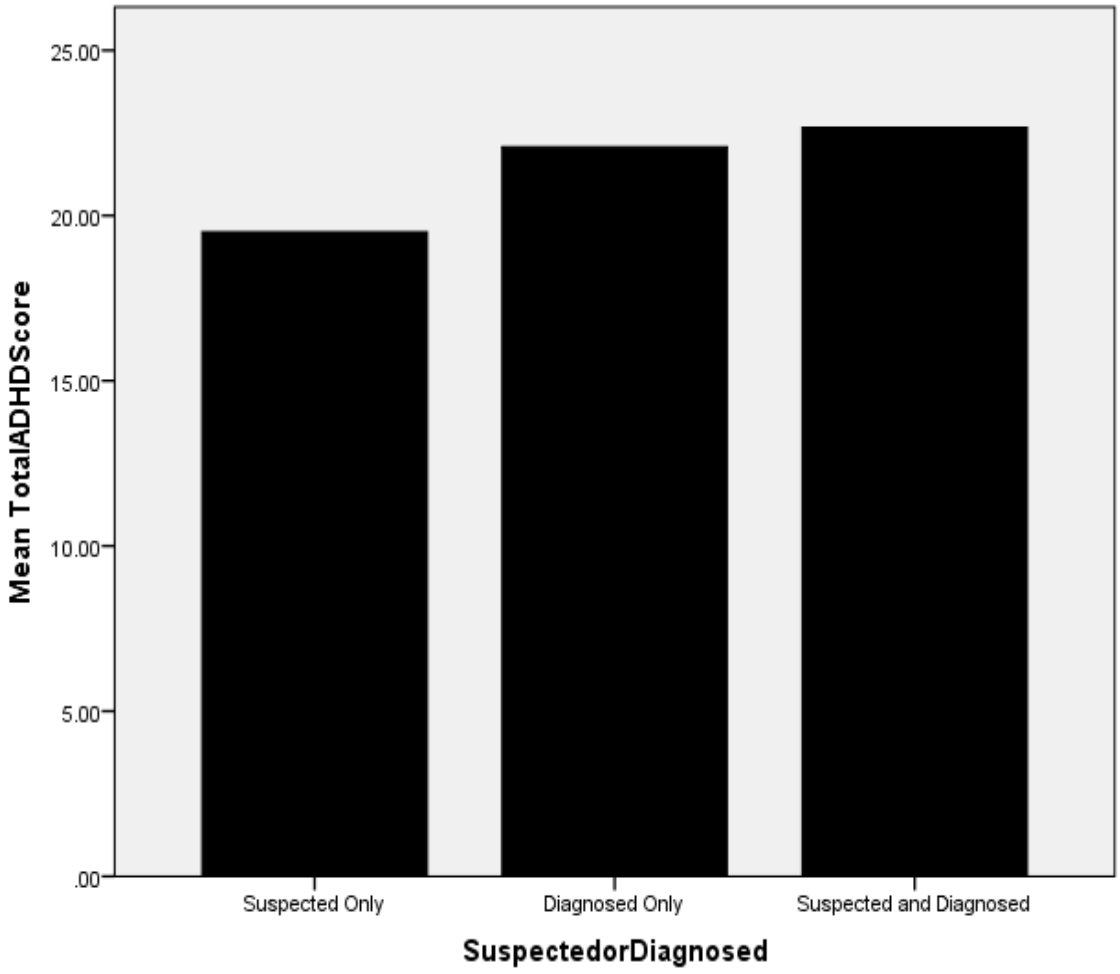

Graph 4

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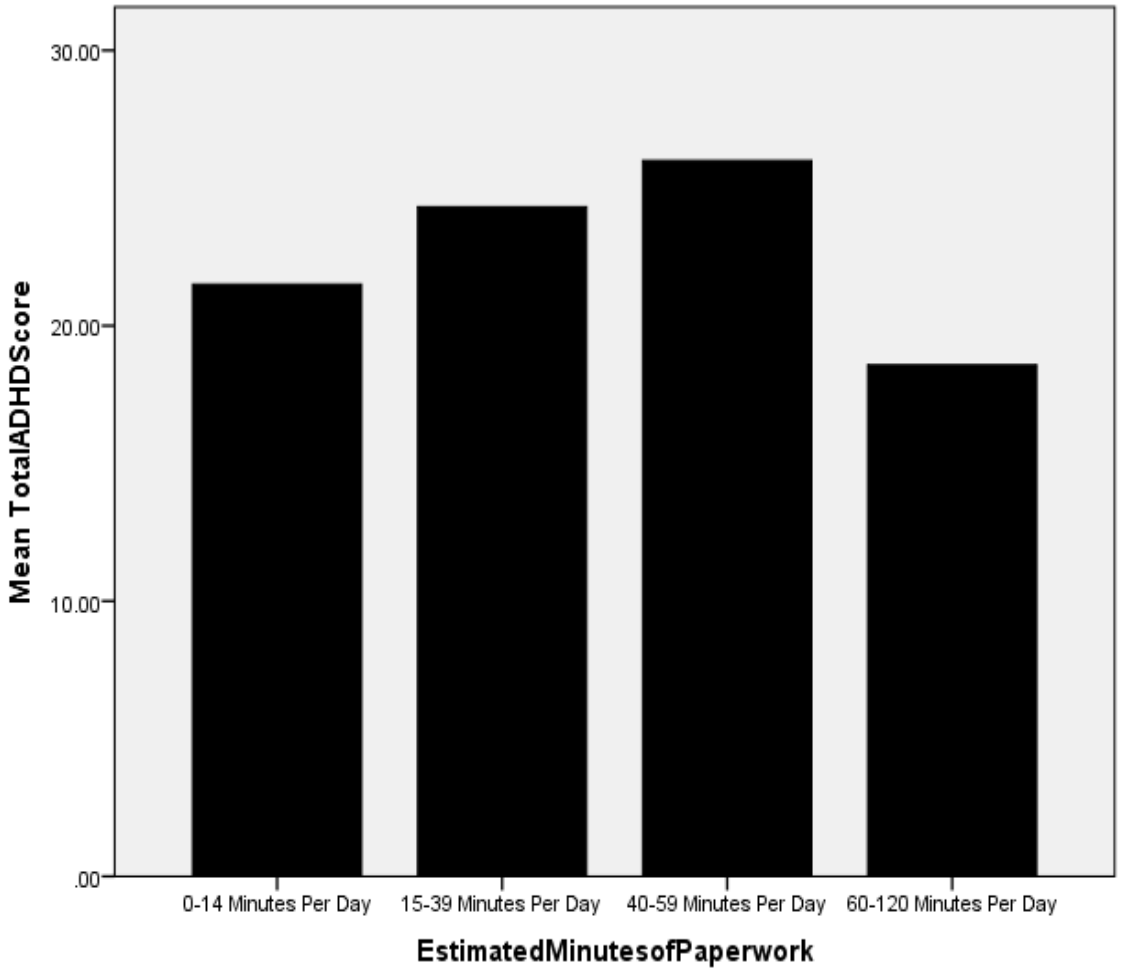
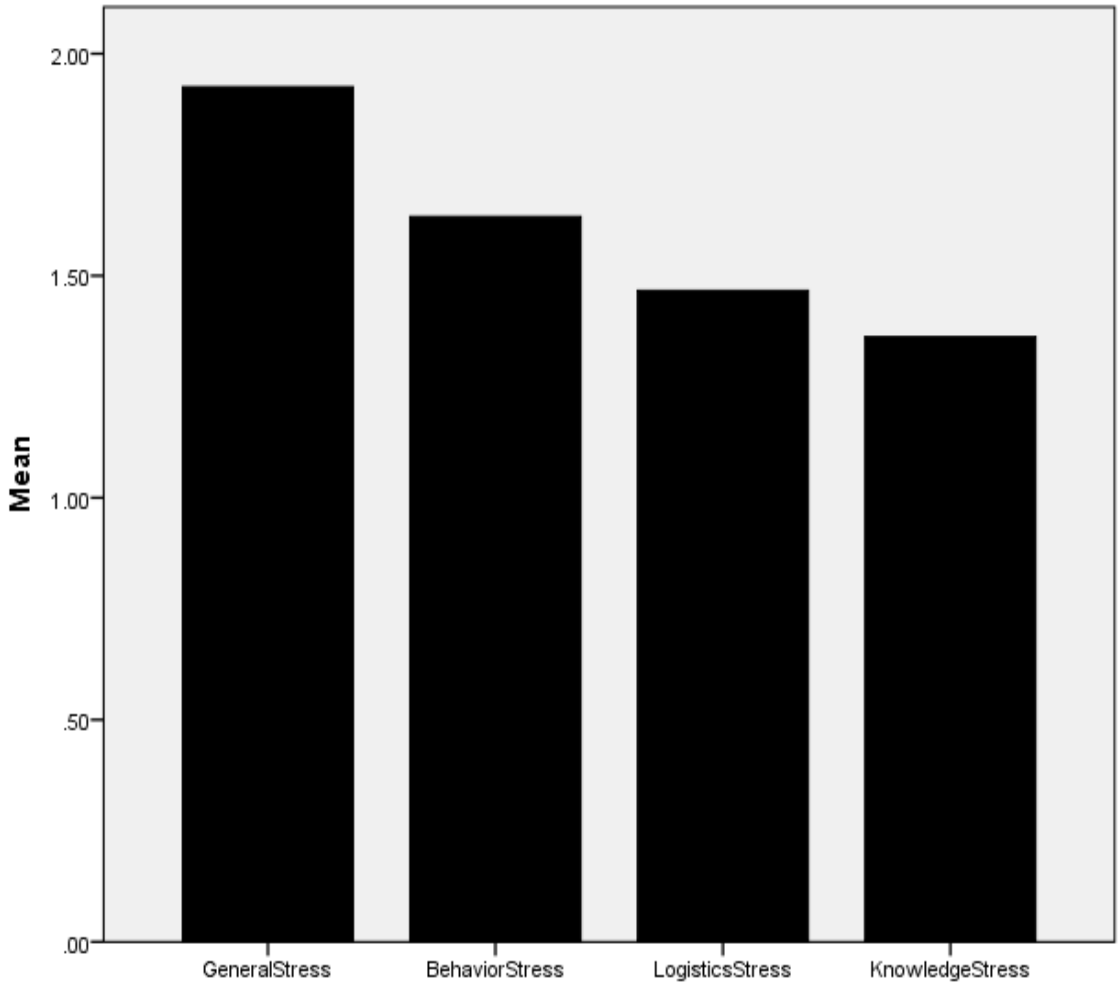


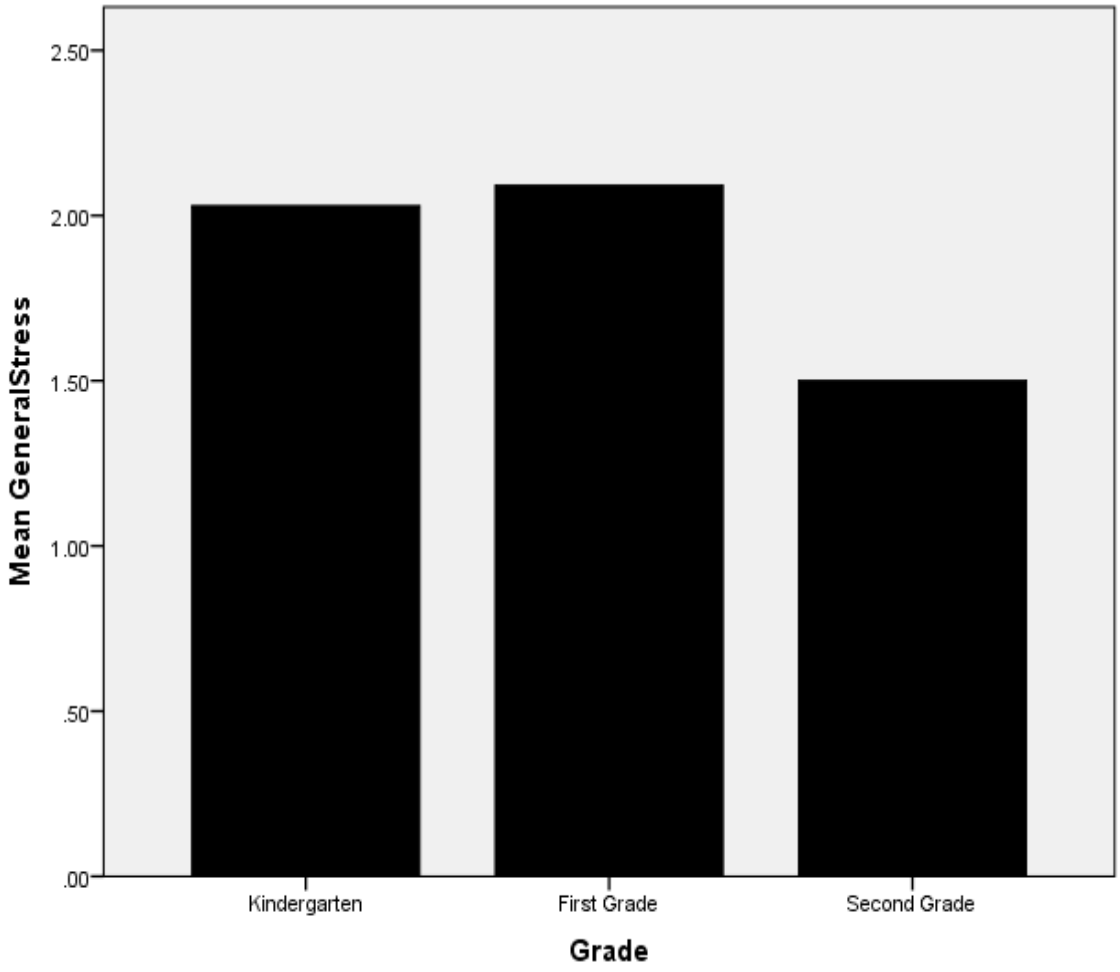
Graph 5

Appendix A



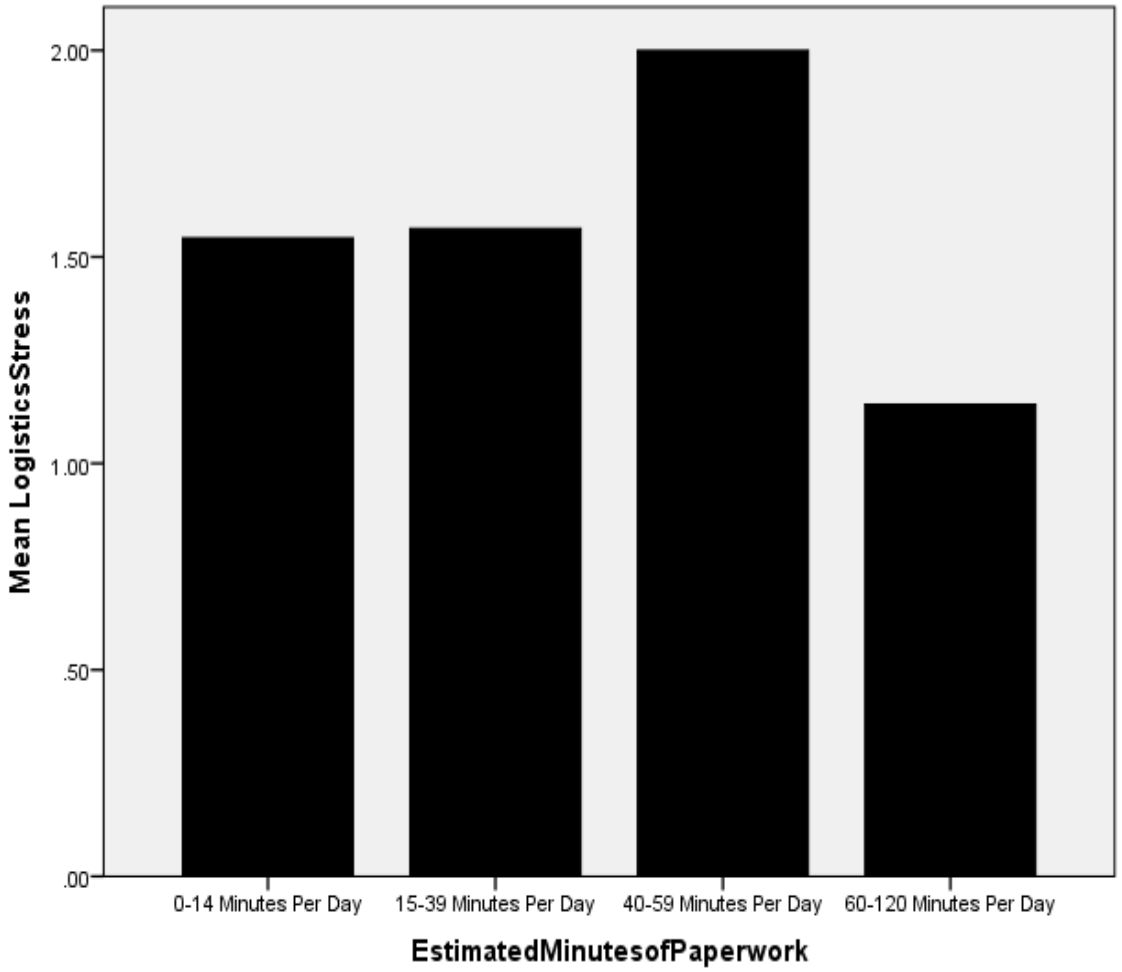
Graph 6

Appendix A



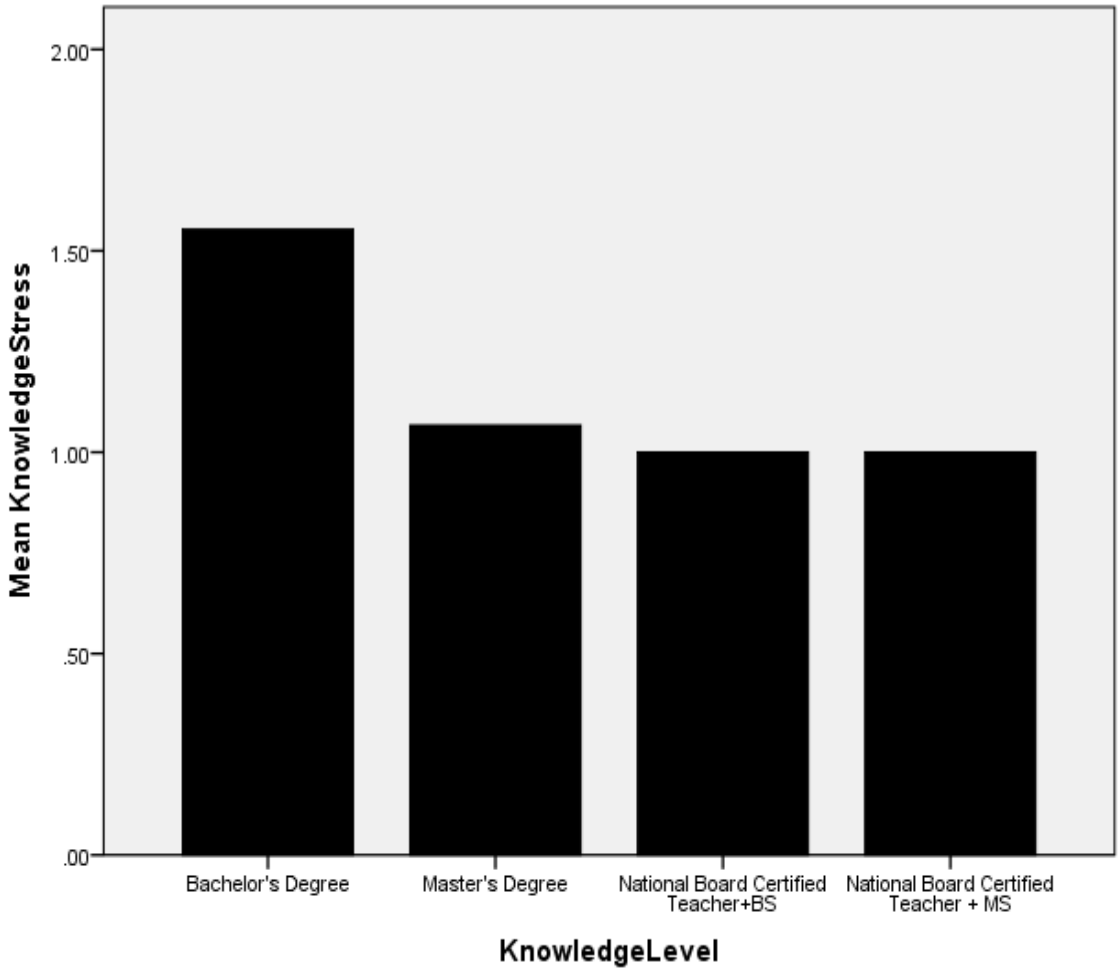
Graph 7

Appendix A



Graph 8

Appendix A



Graph 9

Appendix B

PSS-14 +2

PSS- 14 Adapted Scale for Teacher Stress in regards to ADD/ADHD Instructions:

This questionnaire focuses on your feelings and thoughts during THE LAST WEEK. In each case, you will be asked to indicate your response by placing an "X" over the circle representing HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate. The purpose of this questionnaire is to determine the impact of ADD/ADHD in regards to teacher knowledge, classroom logistics, and characteristics upon teacher stress.

	Almost Never	Fairly Never	Sometimes	Often	Very Often
	0	1	2	3	4
1. In the last week, how often have you been upset because of something that happened unexpectedly regarding your students with ADD/ADHD?	○	○	○	○	○
2. In the last week, how often have you felt that you were unable to control the important things in your classroom regarding your students with ADD/ADHD?	○	○	○	○	○
3. In the last week, how often have you felt nervous and "stressed"?	○	○	○	○	○
4. In the last week, how often have you dealt successfully with day to day behavior regarding your students with ADD/ADHD?	○	○	○	○	○
5. In the last week, how often have you felt that you were effectively managing important changes that were occurring in your classroom teaching strategies regarding your students with ADD/ADHD?	○	○	○	○	○
6. In the last week, how often have you felt confident about your ability and knowledge in regards to your students with ADD/ADHD?	○	○	○	○	○
7. In the last week, how often have you felt that things were going effectively in your classroom regarding your students with ADD/ADHD?	○	○	○	○	○
8. In the last week, how often have you found that you could not cope with all the things that you had to do regarding your students with ADD/ADHD?	○	○	○	○	○
9. In the last week, how often have you felt that your training and preparation was sufficient when working with your students with ADD/ADHD?	○	○	○	○	○

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PSS-14 1 of 2

Appendix B

PSS-16

	Never	Almost Never	Sometimes	Fairly Often	Very Often
	0	1	2	3	4
10. In the last week, how often have you dealt successfully with day to day learning regarding your students with ADD/ADHD?	○	○	○	○	○
11. In the last week, how often have you been able to effectively maintain the attention of your students with ADD/ADHD during instructional time?	○	○	○	○	○
12. In the last week, how often have you been frustrated because of things that happened that were outside of your control? (i.e. medication consistencies, state mandates, changes in policy)	○	○	○	○	○
13. In the last week, how often have you found yourself thinking about tasks (paperwork) that you have yet to accomplish regarding your students with ADD/ADHD?	○	○	○	○	○
14. In the last week, how often have you been able to effectively manage the way you spend your instructional time regarding your students with ADD/ADHD?	○	○	○	○	○

`

15. In the last week, how often have you felt that you were effectively meeting the needs of all students in your classroom?

Never	Almost Never	Sometimes	Fairly Often	Very Often
0	1	2	3	4
○	○	○	○	○

16. In the last week, how often have you been able to effectively manage the way you spend your instructional time regarding all students?

Never	Almost Never	Sometimes	Fairly Often	Very Often
0	1	2	3	4
○	○	○	○	○

version: 03/11/2013
PSS-14 2 of 2

Appendix C

Demographic Information:

School:_____

Grade Currently Teaching: 1 2 3 4 5 6 (Please Circle one.)

Certification:

Number of students in class;

Students with ADD/ADHD are present in my class: None Suspected Diagnosed

(Please circle one.)

If suspected or diagnosed, how many do you estimate? _____

Estimated number of minutes spent completing paperwork each day:

Number of students that receive specialized services outside of the general education classroom (excluding speech/language therapy): _____

Appendix D

Institutional Review Board Application for Approval
Annie Ellis

Purpose: The purpose of this study is to explore the extent to which teacher knowledge, classroom logistics, and the behavior of child with ADD/ADHD contribute to teacher stress in South Mississippi schools.

Procedures: The researcher expects to gain a convenient sample of 20-25 participants with a range from 18-65 years of age. The subject population will be elementary education classroom teachers from public school schools that house grades K-2. The subjects will be obtained from public school districts in South Mississippi. Possible districts where the researcher will seek subjects are Lamar County School District and Petal Public School District. The districts are comparable by the Mississippi Department of Education in levels of qualification, and by Child First Annual Reports. The districts include representation from diverse racial, cultural, and ethnic backgrounds, and have students and staff members who regularly interact with each other. After the researcher gains approval by the Institutional Review Board, the researcher will contact the superintendents for each of the school districts selected for the study in order to seek district approval of the study before the researcher seeks support from the principals of each school and gains access to the school's educators. Then, the researcher will call each Kindergarten to sixth grade school and explain the study and its background information to school administrators. If the school staff agrees to participate, the researcher will deliver survey packets to the school in individual envelopes for each general education teacher to complete. If necessary, the researcher will attend a faculty preparation day or meeting to recruit teachers. An overview of the study will be given to teachers and their consent will be given by voluntary completion of the study.

Measurement: The survey is anticipated to take no more than 10-20 minutes to complete by the participant. It can be completed at any time after distribution, and before collection in any location chosen independently by the participant. The survey is conducted in paper form in one stapled packet consisting of four sheets of paper- the cover letter and consent information, background information sheet, and the two-page survey. The Perceived Stress Scale (PSS) measures the degree to which occurrences in one's life are determined as stressful. (Cohen, S., Karmark, T., and Mermelstein, R., 1983). For the purpose of this study, the scale has been adapted to more specifically to measure stress in relation to students with ADD/ADHD in the general education classroom. Participants will be asked to rank, on a Likert-type scale how often they experienced a symptom in the last week. The participant will mark a score from 0 to 5, with 0 meaning that he or she never felt stressed to 5 meaning that he or she felt stressed frequently. The measurement is entitled, "The Perceived Stress Scale-ADHD," and is comprised of 14 questions. The scoring ranges for the first 14 items pertaining to students with ADD/ADHD are 0-48. Two questions were added that pertained to the "whole class" versus those children with

"ADD/ADHD" for comparison purposes, but will be scored separately. These questions at the end of the survey will be scored independently with a range from 0 to 10. Of the original 14 item questionnaire, most questions were altered slightly for use in this study with a simple phrase added that said, "regarding students with ADD/ADHD." The original questionnaire was
Appendix D

designed to gather information about how participants felt over the past month. In this study, the revised scale asked participants to reflect on their views based on the experiences of the past week, in order to gain a more accurate description of feelings. The purpose for the study was added to the paragraph of directions at the top of the form.

Benefits: While there will be no individual incentives for participating in the research process, the study will have benefits for educators and administrators involved. This information could be passed along to colleagues and other professionals to find ways to combat teacher stress and provide useful information for further research into this field of study. The school environment for teachers could be improved if the study more clearly outlines sources of teacher stress.

Risks: In no way can a participant in this study be harmed physically or psychologically by his or her voluntary participation. The researcher will inform participants of the purpose for the study and answer any questions before the survey is given out to them. Participants are free to quit or refuse to complete the survey at any time, and are free to contact the researcher if there are concerns. There is no risk of personal, psychological, or physical harm in participation with this study.

Confidentiality: To keep confidentiality of the subjects, the forms will be filled out anonymously. The researcher will know no names of participants. Participants will be asked to provide no personal identification information, and to only fill in demographic questions provided on the questionnaire. The survey will be distributed in an envelope, and once complete will be placed back into the envelope to be sealed until opened by the researcher. To keep confidentiality of the data, the researcher of the study, Annie Ellis, and the advisor of the study, Dr. David Daves, will be the only ones to have access to the data gathered. The data will be kept secure at the home of Annie Ellis in a locked box. After the study is completed, the surveys and data will be burned.

Informed Consent: Whereas there is no assurance that can be made concerning results that may be obtained (since results from investigational studies cannot be predicted) the researcher will take every precaution consistent with the best scientific practice. The time required of the subject is between ten and twenty minutes. Participation in this project is completely voluntary, and participants may withdraw from this study at any time without penalty or prejudice. Questions concerning the research should be directed to Annie Ellis at 601.955.0566. This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research

participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820. A copy of this form will be given to the participant.

Appendix D

THE UNIVERSITY OF
SOUTHERN MISSISSIPPI

INSTITUTIONAL REVIEW BOARD
118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months.
  Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **12101814**
PROJECT TITLE: **Teacher Stress and Attention Deficit/Hyperactivity Disorder**
PROJECT TYPE: **Thesis**
RESEARCHER(S): **Annie Ellis**
COLLEGE/DIVISION: **College of Education & Psychology**
DEPARTMENT: **Curriculum, Instruction, and Special Education**
FUNDING AGENCY/SPONSOR: **N/A**
IRB COMMITTEE ACTION: **Expedited Review Approval**
PERIOD OF APPROVAL: **04/29/2013 to 04/28/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board

Appendix E

THE UNIVERSITY OF SOUTHERN MISSISSIPPI
AUTHORIZATION TO PARTICIPATE IN RESEARCH PROJECT

Participant's Name _____

Consent is hereby given to participate in the Honors College thesis research project entitled Teacher Stress and Attention Deficit/Hyperactivity Disorder. Procedures and/or investigations
to be followed and their purpose, including any experimental procedures, were explained by
Annie Ellis. Information was given about all benefits, risks, inconveniences, or discomforts that might be expected. The time required of the participant will be no longer than twenty minutes.

The opportunity to ask questions regarding the research and procedures was given. Participation in the project is completely voluntary, and participants may withdraw at any time without penalty, prejudice, or loss of benefits. All personal information is strictly confidential, and no names will be disclosed. Any new information that develops during the project will be provided if that information may affect the willingness to continue participation in the project.

Questions concerning the research, at any time during or after the project, should be directed
to Annie Ellis at (601)955.0566. This project and this consent form have been reviewed by the Institutional Review Board, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research participant should be directed to the Chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

A copy of this form will be given to the participant.

Signature of participant_____ Date _____

Signature of person explaining the study
_____Date_____

Appendix F

Dear _____ Public School District teachers,

Hello, my name is Annie Ellis, and I am a senior Honors College student at the University of Southern Mississippi, majoring in Elementary Education. Dr. David Daves, the Curriculum, Instruction, and Special Education department Chair has agreed to serve as advisor and assist me in this research project. I am asking for your participation in a research project targeted at Kindergarten through sixth grade public school general education teachers. The project focuses on teacher stress as it pertains to students with Attention Deficit/Hyperactivity Disorder.

With the ever-changing public school environment, teaching can be a high-pressure profession. The goal of this project is to shed light on what factors affect the stress levels of teachers in relation to students with disabilities, specifically ADD/ADHD in the general education classroom. It is hopeful that the results of this research will enhance the understanding and information database for present and future teachers, administrators, parents, and other support personnel in order to ensure the best possible learning environment for teachers and students alike.

I would like to thank you for your consideration of participation in this survey, and I look forward to communicating the results with you and other committed educators. I intend to bring more knowledge and awareness to this aspect of education, and to continue the tradition of dedication to academia as we move into the twenty-first century.

Sincerely,

Annie M. Ellis

Appendix G

P.O. Box 609
424 Martin Luther King Drive
Purvis, MS 39475
Phone: 601-794-1030 Fax: 601-794-1012
www.lamarcountyschools.org

November 26, 2012

TO PRINCIPALS:

Annie Ellis, USM honor student, has been granted permission by the Lamar County School District to conduct a survey with the K-6 teachers on the topic of teacher stress as it pertains to students with ADHD effective November 1, 2012. This survey is voluntary.

Sincerely,

Dr. Ben Burnett

Appendix H

PETAL SCHOOL DISTRICT

www.petalschools.com

ADMINISTRATIVE OFFICES
115 East Central Ave.
P. O. Drawer 523
Petal, MS 39465
Phone: 601-545-3002
Fax: 601-545-1329

Hometown Values
Petal SCHOOL DISTRICT
Global Vision

December 7, 2012

To Whom It May Concern,

Annie Ellis, a senior at the University of Southern Mississippi has requested permission to conduct research within our school district. It is my understanding that this research is a part of the required senior honors thesis.

In making this request, Ms. Ellis met with Dede Smith, principal at Petal Primary School, to discuss the nature of the study and the process that will be used to gather the data. The study, which will investigate the relationship between teacher stress and students with ADD/ADHD in the general education classroom, has the potential to provide further insight into meeting the needs of ADD/ADHD students and also ways to support teachers in these efforts.

Ms. Ellis has my permission to conduct research within the Petal School District at Petal Primary School. Upon completing the research and analyzing the data, Ms. Ellis has also agreed to return to Petal Primary School to share the findings and implications of the study with the faculty and administrators.

Please let me know if we can be of further assistance to you.

Sincerely,

John Buchanan, Ph.D.
Superintendent

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