The Relationship between Positive Behavior Supports, Student Achievement, Severe Problem Behavior, and Administrative Stress

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THE RELATIONSHIP BETWEEN POSITIVE BEHAVIOR SUPPORTS, STUDENT ACHIEVEMENT, SEVERE PROBLEM BEHAVIOR, AND ADMINISTRATIVE STRESS

By

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Dissertation

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Due to the pressures and expectations for current and future principals to create safe and welcoming schools with high student achievement, a better understanding of the relationship between Positive Behavior Supports (PBS), student achievement, severe problem behavior, and administrative stress was needed. This study investigated the relationship between these four factors, as measured through the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2003), Adequate Yearly Progress (AYP) (OPI, 2008), suspension/expulsion rates, the Administrative Stress Index (Gmelch & Swent, 1977), and respondent characteristics.

All practicing elementary and secondary principals in Montana were invited to participate in this survey via online and mailed invitations; 232 principals responded out of 516 possible. Respondent characteristics indicated the sampling was an accurate representation of Montana principals. The resulting data were analyzed for correlations between the four main factors and their components. Variables meeting screening tests were subjected to discriminant function analysis. All combinations of variables including PBS and administrative stress levels were also subjected to further statistical analysis.

Results indicated that Montana principals reported low to moderate levels of administrative stress and high levels of PBS components present. Participants indicated AYP status in all areas, as well as levels of severe problem behavior, as similar to state averages. No experimentally important relationships were found between district size, school grade level, school poverty level, previous training/education, or years of experience, nor were these variables found to have an experimentally important relationship with any other study variables.

No experimentally important relationship was found between PBS rates, student achievement, severe problem behavior, or administrative stress. However, an experimentally important relationship was found between level of PBS-related training and rates of PBS components present; statistical analysis showed a consistent pattern of participants with the highest levels of PBS-related training reporting the highest rates of PBS components present. In addition, though the results did not meet tests of importance, there was a consistent pattern of low administrative stress levels associated with higher rates of PBS components present. Results are discussed in terms of implications for practice and future research.
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I wish to acknowledge the support and assistance given to me by my dissertation committee members; without their feedback and effort, I would not have been able to complete this dissertation. I would like to acknowledge Dr. Roberta Evans for encouraging me to begin on the path towards a doctorate in the first place. Thank you to Dr. Bill McCaw for giving me a sound foundation in research and analysis and for pushing me to always get it right. Thank you to Dr. Beverly Chin for initial support to me years ago to enter the field of education and for her always fine writing advice. Thank you to my chair, Dr. John Matt, for inspiring me years ago with his tales of leadership and for taking on this project with me, despite the many miles separating us. Lastly, a very special thank you to Dr. Merle Farrier for helping me with the statistical aspects of the project, and for being an exemplary educator, colleague, and mentor.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. ii  

ACKNOWLEDGMENTS ............................................................................................... iii  

LIST OF TABLES AND FIGURES ............................................................................... vii  

DEDICATION ............................................................................................................... ix  

CHAPTER ONE: FOCUS OF THE STUDY ................................................................... 1  

Introduction .............................................................................................................. 1  
Purpose of the Study .................................................................................................. 5  
Research Question ..................................................................................................... 5  
Statement of the Problem .......................................................................................... 6  
Definition of Terms .................................................................................................... 7  
Significance of the Study ............................................................................................ 10  
Summary ..................................................................................................................... 10  

CHAPTER TWO: REVIEW OF THE LITERATURE ....................................................... 11  

Introduction .............................................................................................................. 11  
Administrative Stress ................................................................................................. 11  
    Stress and Its Costs ................................................................................................ 11  
    Effective Leadership for Student Achievement and Its Costs ......................... 14  
    Effective Leadership for Student Achievement for Challenging Students ....... 15  
    Costs of Effective Leadership ............................................................................. 19  
Student Achievement ............................................................................................... 23  
    Student Achievement and High-Stakes Accountability ..................................... 23  
    Accountability and Instructional Leadership ..................................................... 27  
Severe Problem Behavior ......................................................................................... 30  
    Educating Challenging Students ....................................................................... 31  
    Individuals with Disabilities Education Act ..................................................... 31  
    Least Restrictive Environment .......................................................................... 32  
    Serious Emotional Disturbance ......................................................................... 33  
    Severe Problem Behavior Students .................................................................. 34  
    Referral and Identification of Severe Problem Behavior Students ................... 35  
    SPB Students as a Uniquely Challenging Population ........................................ 36  
    Inclusion SPB Students ...................................................................................... 38  
Positive Behavior Supports ...................................................................................... 40  
    Severe Problem Behavior .................................................................................. 41  
    SPB and Positive Behavior Supports .................................................................. 41  
    History of Positive Behavior Supports ............................................................ 44
CHAPTER FIVE: DISCUSSION…………………………………………………………119
Introduction…………………………………………………………………………………119
Overview of the Study……………………………………………………………………119
Discussion …………………………………………………………………………………122
Recommendations……………………………………………………………………………126
   Recommendations for Practice…………………………………………………………126
   Recommendations for Future Research………………………………………………129
Implications………………………………………………………………………………133

REFERENCES …………………………………………………………………………136

APPENDIX A: Survey Invitation and Instrument: Response Frequency Included …149
APPENDIX B: Survey Use Permission ……………………………………………………158
APPENDIX C: Administrative Stress Index Clusters of Stressors and Scoring……….159
LIST OF TABLES AND FIGURES

Tables

Table 1. Levels on Administrative Stress Index: Mean Rank, Median Rank, and Range………………………………………………………………………………95

Table 2. Rates of Positive Behavior System (PBS) Components In-place Compared with Amount of PBS Training…………………………………98

Figures

Figure 1. Gender distribution of survey participants as compared to state Office of Public Instruction data, expressed as percentage of total responses…..78

Figure 2. District size category frequency expressed as percentage of total responses……………………………………………………………………………79

Figure 3. Participants’ school sizes as compared to state data, expressed as percentage of total…………………………………………………………………………80

Figure 4. Frequency of types of schools participants supervised, out of 220 total responses…………………………………………………………………81

Figure 5. Participants’ school type compared to state data, expressed by percent of total…………………………………………………………………………82

Figure 6. Frequency of source of participants’ initial licensure……………….83

Figure 7. Percent and number of participants answering yes in regards to types of Positive Behavior System (PBS) training……………………………..84

Figure 8. Participants’ schools’ AYP status in reading and math………………86

Figure 9. Participants’ reported AYP status for math and reading as compared to state data for same year, 2007-2008……………………………………86
Figure 10. Participants’ predictions of AYP status next year for reading and math………………………………………………………………………………..87

Figure 11. Participants’ schools’ AYP status in attendance……………………88

Figure 12. Participants’ schools’ AYP status in graduation…………………88

Figure 13. Participants’ reported AYP status for attendance and graduation as compared to state data for same year, 2007-2008……………………………………89

Figure 14. Participants’ predictions of AYP status next year for attendance…………………………………………………………………………90

Figure 15. Participants’ predictions of AYP status next year for graduation………………………………………………………………………………90

Figure 16. Participants’ rates of Positive Behavior System Components in place……………………………………………………………………91

Figure 17. Mean rank levels reported on Administrative Stress Index…………94
DEDICATION

This work is dedicated to my family and friends who stood by me even though I had to push them aside at times to finish this project. My father, Joel Guthals, has always inspired me to achieve and learn more than I ever thought possible. My mother, Ann Guthals, has always inspired me to look closely at what appears to be the truth and find out what is really going on. My brother and best friend, Joshua Guthals, has listened tirelessly during both the frustrated and excited points along this journey. My dear friend, Mary Kathryn Rountree, helped with those mundane matters that I could not afford to pay anyone to help me with and kept me focused on the bigger picture. And, most important, my dear husband, Craig Pilling, who had no idea what he was getting into when he married an ambitious middle school teacher; his incredible support, forgiveness, love, and encouragement is why this project, and so much else, has succeeded. This work is also dedicated to the public school children who allow me to spend my days with them and share in their triumphs, trials, joys, and sorrows; they are the reason we must always know more and do better as educators.
CHAPTER ONE: FOCUS OF THE STUDY

Introduction

The role of public school principal is nearly overwhelming in its complexity. An elementary principal must understand everything from phonemic segmentation to personnel supervision in order to facilitate an optimal learning environment in his or her school. Secondary principals must understand personnel supervision, as well, but are less concerned with phoneme segmentation and more concerned with college prep course schedules, drop out rates, and alternative education. Many studies have investigated the importance of various aspects of the complex job of a principal, but more importantly, all of these studies have occurred because of the indisputable importance of the principalship itself (Nettles & Herrington, 2007). Research demonstrates that successful schools, schools with enviable student achievement, are run by successful principals (Newmann, King and Youngs, 2000). Schools without such leaders may have great teachers or great programs, but they will never have a great school community, equipped to deal with the challenges of providing public school education in the 21st Century (Fullan, 2002).

Schools fortunate enough to successfully recruit remarkable leaders must be concerned with retaining these leaders. Studies have shown that job stress relates strongly to turnover; the higher the stress, the higher the turnover (Mott, 2000; Parasuraman & Alluto, 1984). In addition, highly stressed individuals are 46% more costly to self and organizations than non-stressed individuals (Goetzel et al., 1998). Job stress can result in cardiovascular disease, musculoskeletal disorders, psychological disorders, workplace injury, and impaired immune function (NIOSH, 1999). The job of the principal becomes
less attractive each year, with pressures of state and federal mandates growing while school budgets continue shrinking. In Minnesota, for instance, though there are an inadequate number of applicants for principal positions, for every administrator leading a school, there are three licensed administrators who do not practice (Institute of Educational Leadership, 2000). Researchers have investigated many issues relating to principal job stress, including salary, work-week length, and increased accountability (Monroe, 2007). In a national survey of school principals of all levels, participants noted that the salary just was not high enough to balance the stress of increased demands to raise students to high standards without adequate support (Kennedy, 2000). The requirements of the job of principal have become a “lethal mix” of “long hours, meager pay, little respect, and new accountability measures” (Institute of Educational Leadership, 2000, p. 12).

Successful principals in the 21st century juggle many issues in order to ensure that “No Child” is “Left Behind.” The current political and societal climate focuses a great deal of attention on struggling students; whether their issues are behavioral or academic, these students’ needs must be met. Federal legislation now requires that all students meet high standards of achievement; schools with acceptable overall averages on student achievement measures are no longer considered successful if they also have a minority population, such as disabled students, failing. Principals face sanctions and even job loss if their schools do not meet standards of Adequate Yearly Progress (USDE, 2005).

Students may struggle in school because of learning disabilities, health impairments, language barriers, or other such issues. One of the most challenging groups of struggling students is that of the seriously emotionally disturbed (SED); between 1976
and 1992, the number of seriously emotionally disturbed students served under IDEA increased 48% (US Department of Education, 1995). According to current National Center for Educational Statistics (NCES) data, this population size held steady between 1994 and 2006 (Planty, Hussar, Snyder, Provasnik, Kena, Dinkes, Kewal-Ramani, & Kemp, 2008).

According to the US Department of Education (1995), 50 percent of students qualifying as seriously emotionally disturbed drop out of school, mostly by 10th grade. Ten years later, the number is nearly unchanged; 44.9 percent of students qualified as emotionally disturbed drop out of school before achieving graduation (Planty et al., 2008). According to National Center for Education Statistics Data, students with disabilities reported higher rates of absenteeism than non-disabled students; this holds true across grades 4, 8, and 12 as well as over a span of 11 years (1994-2005) (USDE, 2006).

Children struggling in these ways not only fail their classes, but also bring depression, anxiety, anger, defiance, and violence into the school (USDE, 1995). In order to educate these children and those struggling with similar issues but not qualified for special education support, principals must make difficult decisions involving referral to specialists, treatment, parental involvement, and teacher involvement (Zabel, 1988). Students who are not present in school are not receiving instruction, making it difficult for schools to meet accountability demands. In addition, the No Child Left Behind Act holds schools (and principals) accountable not only for reading and math, but attendance and drop out rates as well.
Principals must provide for the educational needs of challenging students, who may be disruptive or even dangerous, while also maintaining a safe and welcoming learning environment for all of the other students in the school (NCREL, 1996). In 2002, 12.6 percent of 10th graders in the United States reported that they do not feel safe at school, and 46.7 percent reported that disruptions by other students get in the way of their learning (USDE, 2005). Accountability demands cannot be met when not only the students doing the disrupting end up absent due to suspensions or expulsions, but other students do not want to come to school due to safety and disruption issues.

Recent research suggests that a strategy called Positive Behavior Supports (PBS) may be an answer to these difficult demands; a system that can keep students in school and getting along with each other and adults, thereby allowing more time for instruction and focus on student achievement (Stewart, Benner, Martella, & Marchand-Martella, 2007). Proponents of PBS claim that it can help schools educate all students in important social skills, provide higher levels of support for challenging students while still keeping them in school, and free up educators in all roles to spend less time on discipline and disruptive behavior and more time on instruction (e.g., Luiselli, Putnam, Handler, & Feinberg, 2005; Stewart, Benner, Martella & Marchand-Martella, 2007). PBS has been implemented in schools throughout the United States and the United Kingdom, in elementary schools, junior high schools, and high schools. Several state offices of public instruction university education departments have begun programs to bring these strategies to public schools, including Montana, Oregon, Maryland, Illinois, Missouri, Connecticut and Kansas.
Purpose of the Study

The purpose of this study was to investigate the relationship between PBS, severe problem behavior, student achievement, and principal job stress. Most school leaders do not come into administration with an expert-level background in dealing with highly academically or behaviorally challenging students (one can confirm this by checking any principal licensure program coursework requirements, as well as the coursework for teacher licensure which is the preliminary coursework for the vast majority of principals). Yet principals are one of the primary factors in whether or not these children, as well as the other students sharing a learning environment, receive a high quality education (Newmann, King, & Youngs, 2000). Maintaining safe and welcoming schools cannot take time away from meeting educational needs of all students.

As discussed above, principals need a practical method for maintaining discipline that also supports student achievement. PBS promises just this: less time and energy spent on discipline, more time and energy spent on instruction. If PBS works as promised, principals will have less frequent and serious discipline issues to attend to and their schools will see increased student achievement; their schools will be less disrupted and safer, while more of their students will make AYP. Principals interested in changing two such crucial components of their school’s success could implement PBS; finding such a solution to both discipline and student achievement could also be one of the answers to lowering principal job stress.

Research Question

What is the relationship between the presence of Positive Behavior Supports, the amount of serious discipline problems, the numbers of students achieving Adequate
Yearly Progress, and levels of principal job stress?

Statement of the Problem

If universities wish to create successful leaders, school districts wish to retain successful principals, and principals wish to lead safe and successful schools, understanding the relationship between PBS, student achievement, severe problem behavior, and administrative stress is crucial.

This study investigated the relationship between Positive Behavior Supports, student achievement, severe problem behavior, and administrative stress, as measured through the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2000), Adequate Yearly Progress (AYP) (Montana OPI, 2008), suspension/expulsion rates, the Administrative Stress Index (Gmelch & Swent, 1977), and participant variables. This study specifically addressed the following research questions:

1. What status of Positive Behavior Supports (PBS) do principals report?
2. What level of student achievement, as defined by AYP status in reading, math, attendance & graduation rate, do principals report?
3. What level of severe problem behavior, as defined by suspension/expulsion rate and compared to state average, do principals report?
4. What levels of perceived stress do principals report?
5. What is the relationship between the status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress?
6. What is the relationship between these variables and participant variables of district size, school grade level, school poverty level, previous training/education, and years of experience?
Definition of Terms

For the purposes of this study, the following terms are used.

**Administrative Stress** is defined as the interaction between a principal and his/her work environment in which the principal perceives an inability to adequately respond to the demands of the job because of excessive challenge, threat, potential harm, inadequate training, insufficient time, or insufficient internal/external resources to deal with an overwhelming set of tasks (Monroe, 2007).

**District Size** is defined using Montana Office of Public Instruction size categories as follows (MONTANA OPI, 2008):

- **For Elementary Districts** (districts not including any grade levels about grade 8):
  - 1E more than 2500 students
  - 2E 851 to 2500 students
  - 3E 401 to 850 students
  - 4E 151 to 400 students
  - 5E 41 to 150 students
  - 6E 40 or fewer students

- **For High School Districts** (districts not including any grade levels below grade 9):
  - 1H more than 1250 students
  - 2H 401 to 1250 students
  - 3H 201 to 400 students
  - 4H 76 to 200 students
  - 5H 75 or fewer students

- **For K-12 Districts** (districts including grade levels kindergarten through 12):
  - 1K more than 399 students
  - 2K 399 or fewer students

**Positive Behavior Supports** is defined as the “application of positive behavioral intervention and systems to achieve socially important behavior change” (Sugai, Horner et al., 2000, p. 133). The system is arrayed in three tiers, the first tier including the whole
school through primary prevention, the second to address at-risk students through secondary prevention, and the third to address high-risk students through tertiary prevention (Luiselli, Putnam, Handler, & Feinberg, 2005). The positive behavioral interventions and systems have six critical components, as defined by Luiselli, Putnam, Handler, & Feinberg, 2005, p. 184, based on their review of the research:

“(1) setting consensus-driven behavior expectations;
(2) teaching critical interpersonal skills;
(3) providing systematic positive reinforcement for meeting and exceeding performance criteria;
(4) monitoring intervention efficacy continuously through data collection and analysis;
(5) involving all stakeholders in the formulation of discipline practices, and
(6) reducing and eliminating reactive, punitive, and exclusionary strategies in favor of a proactive, preventive, and skill-building orientation.”

Previous training and education is defined as training, whether during licensure courses, after, or on the job, related to PBS, i.e., training related to the core components of PBS as defined above. Previous education is defined as whether participants received their principal licensure in the Montana University system or elsewhere.

Principal is defined as the lead administrator, properly certified, who is responsible for a public school of any combination of grades kindergarten through 12th grade, as described in the Montana School Accreditation Manual. For example, a principal may be responsible for grades K-2, 6-8 or 9-12 (MONTANA OPI, 2005).

School Grade Level is defined as elementary, to mean any combination of grades
kindergarten to grade eight, except schools having only grades above grade 5; junior high, to mean any combination grades five through nine; or high school, to mean any combination of grades nine through twelve (MONTANA OPI, 2005).

**School Poverty Level** is defined as percentage of student body eligible for free or reduced lunch; the higher the percentage, the higher the rate of poverty (MONTANA OPI, 2008).

**Severe Problem Behavior** is defined as disruptive and/or dangerous student behavior issues that result in the most severe consequences, a suspension or expulsion (Turnbull et al., 2002; Scott, 2001).

**Student** is defined as a child in grades kindergarten through 12th grade who is enrolled at a public elementary, middle, junior high, or high school.

**Student Achievement** is defined as making Adequate Yearly Progress (AYP), as defined by Montana’s required 3rd-8th, and 10th grade criterion referenced reading and math test scores, attendance, and graduation rates. Adequate Yearly Progress in reading or math signifies that an adequate percentage of students scored proficient or above on the MontCAS Phase 2 Criterion-Referenced test. The adequate percentage goes up each year; in 2007, for instance the reading proficiency score resulting in achieving AYP was 74% proficient or above. AYP attendance rate signifies elementary and middle schools, and districts containing these grades, achieving 80% attendance rate, based on total enrollment, not just tested grades. AYP graduation rate signifies high schools, and districts containing these grades, achieving 80% graduation rate based on the previous year’s data (MONTANA OPI, 2008).

**Years of Experience** is defined as both years of total years of teaching experience and total years of principal experience.
Significance of Study

This study sought to determine if there is a relationship between PBS, student achievement, severe problem behavior, and administrative stress. Therefore, this study adds to the body of research on best-practices for educating challenging students, as well as the body of research on best-practices for maintaining safe and orderly schools. This study also adds to the body of research on job stress and organizational effectiveness, due to the fact that Positive Behavior Support is an organizational level system. In addition, this study adds to the body of research on best-practices for overall student achievement. The growing number of challenging students in American public schools, the disturbing levels of school violence, and the increased scrutiny of school achievement by the public, makes investigating these relationships a high priority. This information has relevance for teacher education programs and universities, school districts, and principals, related to pre-service and in-service training as well as recruitment and retention practices.

Summary

This study sought to understand the relationship between PBS, student achievement, severe problem behavior, and administrative stress. A thorough review of the literature explaining the background of the issues related to this study, supporting the importance of such a study, and validating the methodology of the study follows in Chapter Two: Review of the Literature.
CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

This chapter reviews the literature related to the main topics of this study, to include administrative stress, severe problem behavior, student achievement, and PBS. Chapter Two also reviews the literature on relevant sub-topics and survey instruments.

Administrative Stress

This first section of Chapter Two reviews the literature related to Administrative Stress. The review of the literature includes an overview of stress, job stress, and administrative stress as well as the sources and outcomes of high administrative stress.

Stress and Its Costs

For several decades, researchers have investigated the impact of stress on physical and psychological health. Many studies have found relationships between stress and the onset of poor health and psychological disorders. For instance, Goetzel, Anderson, Whitmer, Ozminkowski, Dunn, and Wasserman (1998) completed an extensive three year longitudinal study, involving more than 40,000 participants in a variety of careers, investigating the costs of 10 modifiable health risks, including smoking, obesity and tobacco use. Depression and stress accounted for the greatest difference between low-and high-risk people. In fact, depressed individuals were 70% more costly and stressed individuals were 46% more costly than those lacking those risks. Furthermore, Goetzel, et al. (1998) found that depressed and highly stressed individuals should be seeking medical attention for their psychological ailments, as opposed to their physical maladies, in order to lower costs both to themselves and their employers. Though many people
would intuitively place issues with alcoholism or nutrition (obesity) at the higher end of the cost spectrum, these factors were in fact found to be far less costly than depression and stress (Goetzel, et al., 1998). Another interesting relationship has been observed between emotional states and health; individuals with social support tend to be healthier than those without, and individuals with a positive emotional state are more able to obtain and maintain social supports (Salovey, et al., 2000).

The National Institute for Occupational Safety and Health (NIOSH) reports that in 2002, 40% of American workers described their job as very or extremely stressful, 26% felt often or very often burned out or stressed out by their work, and 29% described themselves as quite a bit or extremely stressed at work (NIOSH). In addition, stress is more strongly associated with lost work days than any other injury or illness; in 2001, the number of lost work days for workers with anxiety, stress, or neurotic disorders was, on average, more than four times than the number of workdays lost for all nonfatal injuries and illness combined (NIOSH, 2004).

There is some confusion over the term “stress.” In some contexts, it can mean environmental factors that affect people negatively, yet it can also be used to mean the response of the body to negative factors (Beehr & Newman, 1978). Over the years, stress has come to be a collective term that includes both stimulus and response. NIOSH (1999) defines job stress as a harmful physical and emotional response that occurs when the requirements of the job do not match the capabilities, resources, or needs of the worker. They differentiate between stress and challenge, explaining that when a challenge is met, a worker feels relaxed and satisfied. Job stress results in exhaustion and dissatisfaction (NIOSH, 1999). In addition, job stress can result in cardiovascular disease,
musculoskeletal disorders, psychological disorders (depression, etc.), workplace injury, and even possibly suicide, cancer, ulcers, and impaired immune function (NIOSH, 1999). A study of 276 volunteers were inoculated with the common cold virus and monitored for life stressors and the development of the cold virus (Cohen, Frank, Doyle, Skoner, Rabin, & Gwaltney, 1998). The researchers found that while people dealing with acute stressful life events of less than a month did not develop colds, people dealing with chronic stressors for longer than a month were substantially more susceptible to colds (Cohen et al., 1998). Researchers have also found that job stress has a strong connection to turnover (e.g., Ostroff, 1992; Parasuraman & Alutto, 1984). In their 1984 study of 217 employees of all levels of a food producing company, Parasuraman and Alutto found that felt stress and organizational commitment were the two most immediate predictors of turnover, with felt stress explaining 40% of the turnover.

Gmelch (1982) describes administrative job stress having four stages. The process begins with a set of demands, such as an unscheduled meeting with an angry parent. Stage two is the principal’s perception of the demand; if the principal decides that the event is non-stressful, the cycle ends there. If the event registers unconsciously as stressful, however, the cycle continues to stage three. Stage three involves the response to the stressor and how the principal copes with the stressor. The response can include both physiological reactions and psychological reactions. The coping strategy chosen depends on previous experience and available resources. Stage four is the short and long-term effects of the stressor. The short and long-term effects of the stressor are heavily dependent on not just the principal’s ability to cope with stress, but also the length of time the demands are put upon the principal and how high the stakes of the demands are
for the principal (Monroe, 2007).

*Effective Leadership for Student Achievement and Its Costs*

Often being a school principal is an exciting and exhilarating job. In their role at the head of a school, principals can help an entire school of hundreds or thousands of students to find success. Principals actually can affect levels of student achievement, and to a gratifying degree.

*Effective Leadership*

The meta-analysis *Balanced Leadership* examined more than 5,000 studies spanning 30 years of research regarding the effects of leadership on student achievement; researchers found a “substantial relationship between leadership and student achievement” with an effect size of .25 (Waters, Marzano, & McNulty, 2003, p. 3). The researchers also found that increasing leadership ability would mean an increase in student achievement of 10 percentile points. In addition, Waters, Marzano, and McNulty ranked the effect of various leadership responsibilities for their impact on student achievement; the researchers found the top ranked responsibilities to be:

(a) “situational awareness: is aware of the details & undercurrents in the running of the school & uses this information to address current & potential problems

(b) “intellectual stimulation: ensures that faculty & staff are aware of the most current theories & practices & makes the discussion of these a regular aspect of the school’s culture

(c) “change agent: is willing to & actively challenges the status quo

(d) “input: involves teachers in the design & implementations of important decisions & policies”
In 2001, the Council for Exceptional Children recognized the important yet difficult role principals play in providing education for challenging students by publishing *A Principal’s Guide to Special Education* (Bateman & Bateman, 2001). The authors examined case law as well as dozens of articles and studies, spanning 30 years of scholarly works in the area, in order to create a guide of best practice strategies for principals in the era of inclusion. By aligning these strategies, along with support from other literature, with *Balanced Leadership* (Waters, Marzano, & McNulty, 2003) strategies for overall principal effectiveness, one can develop an understanding of truly effective leadership for inclusion.

*Balanced Leadership* points out the importance of situational awareness in effective leadership (Waters, Marzano, & McNulty, 2003). Situational awareness can be demonstrated in the realm of inclusion when principals attend planning meetings to observe student and teacher progress and acquire new ideas (Keenan, 1994). To increase situational awareness principals should place special education students, classes, and teachers in the mainstream of the school as well as observe each student in the classroom to develop firsthand knowledge (Bateman & Bateman, 2001). Principals must be knowledgeable about special education student needs within the school setting (Guetzloe, 1994). Furthermore, principals should then use information gathered from this to provide proper supports to all of the staff and teachers involved (Webber, 1994; Lewis & Bellow,
When educating special education students, principals use *situational awareness* to understand the details of the individual student’s issues, how these issues affect the general and special education classrooms as well as the school community through recess, cafeteria, and specialists and to assess if there are any current or potential problems connected to these issues (Guetzloe, 1994).

*Intellectual stimulation*, as defined by *Balanced Leadership*, is not only ensuring that staff is aware of current educational theories, but that discussion is an established aspect of school culture (Waters, Marzano, & McNulty, 2003). *Intellectual stimulation* is necessary to keep staff aware of current theories regarding both specific student issues (such as Attention Deficit Disorder) and best practices related to such issues, as well as promoting discussion about such issues in school culture instead of creating a culture that leaves an individual classroom teacher to struggle with a challenging student alone and behind closed doors (Guetzloe, 1994). Best practices associated with both inclusion and intellectual stimulation include providing training opportunities for teachers to learn about authentic assessment procedures; providing common planning time for all teachers to encourage collaboration, co-teaching, and teaming; improving teaching skills by training teachers in collaboration, cooperative learning, teaming, assessment, adaptations, strategy instruction, and content enhancement; providing resources to staff including both print resources and experts and consultants; and establishing teacher mentoring programs (Callahan, 1994; Price, 1994; Bateman & Bateman, 2001).

According to the *Balanced Leadership* researchers (Waters, Marzano, & McNulty, 2003), effective principals act as *change agents*, actively and willingly challenging the status quo; in the context of educating special education students,
principals must look at how the school system provides for these students and lead a process of evaluating that system, its effectiveness, and addressing weaknesses without falling prey to the pull to stay the same because it is easier. Principals acting as change agents in the area of inclusion must share ideals for serving all of the students in the school and community, which can include arranging school-wide activities that celebrate acceptance, belonging, and diversity; shifting language to encourage change, such as avoiding saying “never,” “always,” or “we don’t do that here” (Bateman & Bateman, 2001; Maroney, 1994; Callahan, 1994).

In addition, principals must persistently ask whether a student’s skills can be enhanced and supported in a regular education setting (as opposed to elsewhere) and encourage experimentation with innovative ways of delivering instruction, including multi-age settings (Bateman & Bateman, 2001; Maroney, 1994; Callahan, 1994).

Training teachers, both special and general education, is crucial to providing a successful inclusive program, and principals seeking to change schools to better accommodate inclusion must make training mandatory yet tailored to specific teacher needs (Guetzloe, 1994). Administrators must provide the support necessary for staff dealing with inclusion, including refocusing priorities and redefining roles and responsibilities (Maroney, 1994).

Involving other stakeholders’ input is another critical leadership component, both for Balanced Leadership and for educating special education students (Waters, Marzano, & McNulty, 2003). Classroom teachers, both general and special education, are the ones who will directly interact with and provide education for these challenging students. Principals who involve teacher input in educating special education students must allow
school staff to help inform decisions about how to best provide for these children, both within their classrooms and within the general school community. Best practice suggests involving students and their families early in the process as possible and listening to the family’s priorities and goals (Bateman & Bateman, 2001; Lewis & Bello, 1994; Guetzloe, 1994). Principals must present an attitude to stakeholders that they are an important and desired part of the team and process. Principals can do this by supporting teacher decisions and including parents and teachers on teams responsible for planning for both individual students and school-wide issues of inclusion (Bateman & Bateman, 2001; Lewis & Bello, 1994; Guetzloe, 1994).

Effective leadership creates a *culture* that “fosters shared beliefs & a sense of community & cooperation” (Waters, Marzano, & McNulty, 2003, p. 4); in the context of educating special education students, a principal must create a school culture that shares beliefs about providing education for even the most challenging students, as well as a culture that can cooperate with and support each other (Heflin, Boerson, Grossman, Huette, & Ilgen, 1994). With effective leadership, general and special education teachers would share beliefs about providing for special education students and work together to succeed at this, as well as tapping into a greater sense of community, perhaps including parents and other community stakeholders (Heflin, Boerson, Grossman, Huette, & Ilgen, 1994). Inclusive leaders must share their ideals for educating all students by developing school mission, vision, and belief statements with stakeholders, providing collaborative planning time each day, ensuring that student plans promote inclusion and focus on the specific needs of students, and ensuring that all stakeholders know their roles and expectations (Bateman & Bateman, 2001; Heflin, Boerson, Grossman, Huette, & Ilgen,
1994; Guetzloe, 1994; Price, 1994). Mentoring programs for teachers can also help create a sense of community (Heflin, Boreson, Grossman, Huette, & Ilgen, 1994).

Understanding and acceptance of seriously emotionally disturbed students is the single most important issue related to inclusion; understanding and acceptance must become part of the school culture as modeled by the principal (Guetzloe, 1994).

Lastly, an effective leader is responsible for monitoring/evaluating school practices and their effect on student achievement (Waters, Marzano, & McNulty, 2003). Leaders must do more than just monitor the general school population; in the context of educating special education students, effective leaders must look at school practices related to challenging students as well, and assess if these practices are producing adequate student learning outcomes. The literature states that principals must evaluate not only the school’s mission and progress toward goals each year, but also regularly evaluate staff to ensure that there is good fit between the requirements of the job and the knowledge and skills of the person assigned (Bateman & Bateman, 2001). The literature also states that it is necessary to train paraprofessionals and instructional aides and evaluate their qualifications and job fit on a regular basis (Bateman & Bateman, 2001).

All staff needs on-going observation, coaching, and conferencing (Guetzloe, 1994; Price, 1994). Researchers further advocate that formative data collection strategies should be used to guarantee that all students are profiting from instruction in all settings (Lewis & Bello, 1994).

Costs of Effective Leadership

Unfortunately, successful leadership appears to come at a cost. Today’s high school principals are on the job for an average of 60 to 80 hours each week, as compared
to an average of 45 hours per week several decades ago (Read, 2000). Norton’s 2004 study of Arizona principals found that the job-related time commitments and exhaustive workload causing an inability to balance work and leisure to be the strongest reasons that they might leave their jobs. Principals are expected to be far more than managers, including dealing with bomb threats, leading the school improvement process, planning effective professional development, supervising and instructing teachers, attending after-school events, dealing with discipline, and more (Monroe, 2007).

The increasing demands placed on principals can cause these leaders to question if the job is worth the stress. Expectations and requirements are being heaped upon school principals; it is difficult to find one responsibility that has been taken off. The National Association for Elementary Principals lists six standards in its list of “What Principals Should Know and Be Able to Do”:

1. **Balance Management and Leadership Roles:** Effective principals lead schools in a way that places student and adult learning at the center.

2. **Set High Expectations and Standards:** Effective principals set high expectations and standards for the academic and social development of all students and the performance of adults.

3. **Demand Content and Instruction That Ensure Student Achievement:** Effective principals demand content and instruction that ensure student achievement of agreed-upon academic standards.

4. **Create a Culture of Adult Learning:** Effective principals create a culture of continuous learning for adults tied to student learning and other school goals.
(5) Use Multiple Sources of Data as Diagnostic Tools: Effective principals use multiple sources of data as diagnostic tools to assess, identify and apply instructional improvement.

(6) Actively Engage the Community: Effective principals actively engage the community to create shared responsibility for student and school success (NAESP, 2001).

This list does not include two other aspects of school administration, as described by the Interstate School Leaders Licensure Consortium (ISLLC), the standard all accredited school administrator licensure programs are held to:

(a) Standard 3: The school administrator is an educational leader, who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.

(b) Standard 6: A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context (Council of Chief State School Officers, 2008).

In a survey of over 900 randomly-selected public school principals, Public Agenda found that 48% of principals feel the demands of their job have forced them to make serious compromises in terms of family and personal life (2001). In a variety of surveys asking superintendents across the country why they believe there is a shortage of up and coming administrators, all three national surveys included “job too stressful” in the top three reasons cited (NAESP, 2003). In order to recruit and retain principals, relieving this stress is crucial. A 1998 survey commissioned by both the National
Association of Elementary School Principals and the National Association of Secondary School Principals found that approximately half of the districts surveyed, regardless of the schools’ grade levels or whether they were rural, suburban, or urban schools, reported a shortage of qualified candidates in the labor pool for open positions that year (NAESP, 2008). The New York Times reported that 163 New York City schools began the 2000 school year with substitute principals (Goodnough, 2000).

There is an apparent shortage of recent in-depth research on the issue of stress among public school principals, particularly among elementary principals. Most research on the topic is survey research from national organizations concerned about ensuring that there are future generations of qualified and successful school administrators, such as the American Association of School Administrators. Some research exists on superintendent and high school principal stress, but much of this is case study work, such as Morford’s 2002 study based on in-depth interviews of 10 principals. Yet working principals will tell you that they often hear comments about their position such as, “Why would you want to do that?” The negativity of such comments perhaps comes from a shift in the past decade of what principals are expected to spend their time on. The vast majority of principals, due to certification requirements, used to be teachers, and therefore likely envisioned a career focused on directly helping students and teachers, a logical extension of their previous jobs. However, in a survey of Massachusetts principals, 51% of the participants stated that the task requiring the majority of their time was implementing state mandated initiatives, which are most often a direct result of federally mandated initiatives such as NCLB (NAESP, 2008). Principals, and those wondering why anyone would want to become an administrator, are well aware that the results of such initiatives can go as far
as one’s school’s name in the headlines of the local paper, labeled as a failure due to test scores. The next section of the Review of the Literature will examine the measure of student achievement to which today’s principals are being held accountable: meeting the requirements of the No Child Left Behind Act.

Student Achievement

Student achievement is the central issue at stake when the nation asks if American public schools, and their leadership, are effective (NAESP, 2001). Student achievement can mean many things, including grades earned on a test or in a classroom, understanding a new concept, learning a new skill, being able to demonstrate learning, graduating from high school, cumulative grade point average, or scores on standardized tests. Most studies or reports on student achievement, however, use standardized test scores as their measure of student achievement. The other meanings for student achievement are perhaps more difficult to measure, report, or generalize. Furthermore, as discussed below, national level policies have firmly shifted the national dialogue about student achievement from a general discussion including many variables, to one focused almost solely on standardized test scores.

Student Achievement and High-Stakes Accountability

Student achievement in public schools of the 21st century has become a national mandate of the federal government, backed with public and punitive measures when it does not occur. The legislation, a reauthorization of the Elementary and Secondary Education Act (ESEA) known as the No Child Left Behind Act (NCLB) signed into law in 2002, sets the standard of student achievement, establishes a framework for how to meet the standard, and subjects schools failing to reach the standards to corrective action.
(USDE, 2008). Any state, district, or school accepting federal Title I grant funds must meet the requirements of NCLB

NCLB is based on four principles: (a) increased accountability, (b) parent choice, (c) greater local control and flexibility, and (d) research-based instructional strategies. The act requires states to implement statewide accountability systems that must include annual standardized testing in reading and mathematics for all students, grades 3-8 and annual statewide progress objectives ensuring that all groups of students are proficient, according to state standards, in reading and mathematics. Schools no longer can report their standardized test successes to the local paper based on their entire school or district average. Instead, groups of students, commonly called disaggregated groups, must also be successful. The disaggregated groups include poverty, race, ethnicity, disability, and limited English proficiency, though if the group is small enough, schools are not required to report their data in order to protect individual students. To begin the process, states were required to establish 12-year state plans towards 100% proficiency based on students making Adequate Yearly Progress (AYP) towards the proficiency goal.

Each year, schools are required to test their children with the state-chosen standardized test, and the school’s AYP status is based upon the results. Therefore, each year, each school and district is labeled as “made AYP” or “did not make AYP,” based on both their disaggregated group results and overall results. Within these results, students are either considered novice, nearing proficient, proficient, or advanced. These groupings are based on how well students score on the state tests, and are set by each state. AYP status is based on what percentage of a school’s students score proficient and/or advanced (USDE, 2008). For instance, in order for a school in Montana to have
made AYP in the 2006-2007 school year in the subject of reading, 74% of their students, in both disaggregated groups and overall, must achieve the level of proficient or advanced (Montana OPI, 2008).

Schools are required to make/report AYP status in the areas of reading, math, participation, attendance, and graduation. Reading and math AYP status, as described above, is based on how students score on state-designed standardized tests. Participation of 95% of all enrolled students in both the math and reading tests was required for all groups with at least 40 students in Montana to make AYP in Participation in the 2006-2007 school year. Attendance AYP, required for elementary and middle schools, is determined by the attendance rate, or improvement towards that rate. For instance, the AYP attendance rate in Montana for the 2006-2007 school year was 80% (MONTANA OPI, 2008). The attendance standard high schools are held to is graduation rate, based on the percentage of students graduating instead of dropping out, or improvement towards that goal; 80% was the goal for Montana schools 2006-2007 (MONTANA OPI, 2008).

NCLB also establishes a progression of increasingly punitive actions against schools that do not make AYP for two or more years. Schools who fail AYP for two or more years are labeled as identified for improvement, in need of corrective action, or in need of restructuring; each of these represents further years of AYP failure and punitive actions. Any school given one of these three labels must give students a choice to attend a different public school. In addition, the district must provide transportation to the new school and must use its federal Title I funds for this purpose. Schools failing to make AYP 3 years in a row must permit students to use Title I funds to obtain supplemental educational services from the public or private sector chosen by the students or their
parents. The state is required to set standards for these providers. Schools who fail to make AYP consecutively for five years face restructuring, which can mean that teachers and principals working for the failing school will be fired and replaced as deemed necessary by the state. Other provisions of NCLB include requirements that all teachers meet federal standards of highly qualified and that schools qualify for Reading First grants as part of the Act must use instructional materials that meet federal standards of research-based materials (USDE, 2008).

Such focus on accountability, testing, sanctions, and public school choice changed the world of American public schools forever. Prior to NCLB, the federal government was primarily a source of funding for low-income students; now the federal government shapes the goals and outcomes of public school education directly (Fusarelli, 2004). The promise of NCLB is that it will narrow the achievement gap between minority and non-minority children, between poor and non-poor children, and between disabled and non-disabled children (USDE, 2008); hopefully, the gap will lessen by increasing student achievement for minority, poor, and disabled children, not by decreasing achievement for non-minority, non-poor, and non-disabled children. With disaggregated AYP results, schools and districts can no longer hide the poor achievement of some groups by pulling up the overall average with other groups (Fusarelli, 2004).

NCLB has become a fact of life for educators and their students alike; both groups know intimately the meaning of high-stakes testing. Public school students know they will be subjected to a multi-day barrage of multiple choice questions at least once a year; public school educators know their communities, including parents and boards of education, will be checking whether or not their school made AYP this year. With
legislation of this magnitude, there are of course many opinions, articles, studies, and
surveys on the positive and negative affects of NCLB. Regardless of the variety of
opinions, meeting the requirements of NCLB is how schools and their principals are
judged in regards to student achievement.

Accountability and Instructional Leadership

King Philip Middle School in West Hartford, Connecticut, prior to NCLB, was a
blue-ribbon school; 80% of its students demonstrated proficiency in math and 88%
demonstrated proficiency in reading. According to NCLB requirements, King Philip is
now a failing school; only 41% of its 45 special education students attained proficiency in
math (Fusarelli, 2004). NEA Today reported that in 2002, 18 schools winning the coveted
USDE Blue Ribbon Award the previous year were also labeled failing schools for not
making AYP (NEA, 2008). Teachers have shifted instructional time away from those
subjects not tested, such as art, music, social studies, or physical education in order to
focus on tested subjects, reading, math, and writing (Stecher, 2001). The Center on
Education Policy (CEP) has followed the effects of NCLB, since its inception, in its
series of reports “From the Capital to the Classroom.” Recently, as part of this series, the
CEP reviewed over 300 school districts across the country and found significant changes
in how instructional time is used in elementary schools since the implementation of
NCLB. For instance, 62% of the districts had increased the amount of time spent on
English language arts and/or math; 44% of the districts had increased time for these
subjects while cutting time for science, social studies, art, music, physical education,
lunch or recess (McMurrer, 2008). These changes were not minor; among the districts
shifting instructional time in these ways, more than half cut instructional time in both
social studies and science by at least 75 minutes each per week (McMurrer, 2008).

NCLB is the very definition of being squeezed between accountability mandates and shrinking school budgets; as Baker (2002) put it, the “organizational resources necessary to implement NCLB are not to be found at the State Board of Education and the local schools,” because “over half of the school [districts] in Illinois are already facing budget deficits” (p. 2). The National Governors Association’s estimate in 2003 was that states faced a combined budget deficit of nearly $60 billion and responded by reducing spending on education (Mathis, 2003). Given the cost of the Iraq and Afghan Wars and the status of the current national economy, it is unlikely the federal government will be stepping in to pay for implementation costs. In states dependent upon federal Title I funds to make their school funding systems work, meeting these requirements is not an option; compliance is the only way they can assure that their strapped schools continue to function. For instance, this spring, Arizona lawmakers considered whether they could opt out of NCLB, and found that it would cost their schools $600 million in federal funds (Arizona Republic, 2008). Georgia lost $800,000 of federal Title I aid due to not meeting requirements of NCLB (Olson, 2003).

Though some parents might not be bothered by their child’s school being labeled “failing” because their own child is not failing, the demoralization of teachers and principals working in “failing” schools is a concern (Fusarelli, 2003). The president of the American Federation of Teachers testified before the Senate Committee on Health, Education, Labor and Pensions and the House Education and Labor Committee in that “it’s demoralizing for students, parents, teachers and communities when they know that their schools are making solid academic progress, yet still see them listed in the local
paper as ‘not making the grade’” (McElroy, 2007). Working in a system that does not recognize real progress with struggling or challenging students unless it is large enough progress to pull the entire disaggregated group up to the levels of AYP is a recipe for frustration, and sometimes disaster. McGhee and Nelson cite three highly successful and experienced principals in Texas who were removed from their positions solely on the basis of testing results (2005).

When faced with funding issues, the press, sanctions, and even job loss, principals choose to focus their student achievement efforts on meeting the requirements of NCLB. The focus can be seen in changes in instructional time shifting away from time spent on a wide array of subjects, to instructional time heavily focused on reading, writing, and math (McMurrer, 2008). As schools and their principals make these shifts, other changes follow. For instance, to increase instructional time on reading and decrease the arts or physical education, it may be necessary to hire a different array of staff, invest in different materials, or change professional development. Therefore, the changes seen in how instructional time is devoted are likely the end result of administrative level planning for such changes, including planning that touches on each of the six ISLLC standards, such as professional development, scheduling, staffing, facilities, and community interfacing. Finding the time necessary to facilitate and sustain such changes is one of today’s principals most difficult challenges, made more so by the high-stakes discussed above. NCLB brings forward another challenge for principals as well; in its promise to address student achievement for all disaggregated groups, NCLB forces leaders to confront the issues of student achievement for even the most struggling students. These groups include students with mental, physical, and cognitive disabilities, as well as those
students exhibiting chronic and/or problem behavior. As discussed above, principals and their schools must meet not only academic standards of student achievement, but also standards of attendance, graduation, test participation rates. These other marks, along with the standards for reading and math achievement, mean that principals must ensure all children are at school and learning successfully regardless of the issues they bring with them.

Severe Problem Behavior

Many factors impacting student achievement have been identified over years, including factors inside the school (class size) and outside (socioeconomic status). Recently, the focus has turned to the role of the principal in improving student achievement. If the role of the principal in improving student achievement can be understood, the gains are enormous. As opposed to one classroom teacher, a single elementary principal can impact thousands of students (Nettles & Harrington, 2007). The leadership of the principal informs all levels of such changes, from introducing the change, providing training, continuing training, and continuing to allocate the resources necessary to make the change a permanent part of the school culture. For example, as Klingner, Arguelles, Hughes, and Vaughn (2001) discuss, principal leadership is the primary factor in whether or not a change to research-based practices is merely introduced to a school community or truly becomes a part of the culture.

Addressing the needs of problem behavior students represents a significant change in school culture (Bateman & Bateman, 2001). State and federal mandates now demand accountability not only as a general school population, but also within specific disaggregated groups (United States Department of Education, 2005). As Nettles &
Harrington (2007) point out, one of the most challenging disaggregated groups is that of students with disabilities. If schools cannot grow student achievement within even this most challenging group, this can be the difference between meeting Adequate Yearly Progress or not.

*Educating Challenging Students*

Learning disabilities are just one of the challenges students bring to educators, but legislation protecting disabled students’ education rights have established societal expectations of how American schools educate all students with challenges.

*Individuals with Disabilities Education Act*

The Rehabilitation Act of 1973 ensures citizens with disabilities full participation in federally funded programs. Section 504 of this act, the section most often applied issues of education and disabilities, states that an individual cannot be excluded from participation in, denied the benefits of, or be discriminated against by any program receiving Federal funds, including public schools. This protects students who meet one of the following criteria:

5. has a physical or mental impairment which substantially limits one or more of such person’s major life activities, (ii) has a record of such an impairment, or (iii) is regarded as having such an impairment (29 U.S.C Sec. 706)

Learning is considered a major life activity, as well as caring for oneself, performing manual tasks, speaking, and so on. Any student who meets these criteria is considered as having a disability. Students may need services in order to benefit from their education and can be provided these services with or without being qualified for Special Education. If a student does meet the qualifications for Special Education Services, the Individuals
with Disabilities Education Act requires an individualized education program (IEP). Students receiving services outside the bounds of “regular” accommodations, but not qualifying for Special Education, must be provided a “504 Plan,” a written service plan similar to an IEP. A related act, The Education for All Handicapped Children Act of 1975, further pushed schools to provide for students with disabilities. This act promises all students “FAPE,” a Free Appropriate Public Education. In 1990, the act was expanded and renamed the Individuals with Disabilities Education Act (IDEA). Some of the most important components of the expanded version of this act include least restrictive placement and access to special instruction to meet the needs of students with disabilities at no cost to the parents. Decades of case law has upheld that schools do in fact have to deliver FAPE to all students (Bateman & Bateman, 2001).

**Least Restrictive Environment**

*Education for All* states, “to the maximum extent appropriate, handicapped children…are educated with children who are not handicapped” (20 U.S.C. Sec. 1401 (b) (1)-(5)). This is commonly referred to as *inclusion*. Inclusion presumes that “the student will be in the general classroom, with supports, from the outset unless it is shown that the child cannot benefit from education in the general classroom” (Bateman & Bateman, 2001, p. 14). The general education classroom is hopefully the least restrictive environment, but if a student cannot learn in that environment due to disability, an alternative placement is considered less restrictive (Lewis & Bello, 1994). This is based on the idea that the student be provided with the environment where the most learning can occur while simultaneously maintaining the most contact with students who are not disabled (Bateman & Bateman, 2001; Maroney, 1994). An inclusive classroom is one
where the teacher “employs preventative behavior management strategies,” expects and promotes “high rates of student success (80% or higher),” provides “low rates of criticism and instead provides informative, behavioral-specific feedback,” provides “instructional sequences that include demonstrations, guided practice, independent practice, and review/re-teaching,” has “predictable classroom routines,” and “displays a favorable attitude toward integrating children and youth with disabilities” (Lewis & Bello, 1994 p. 13).

*Serious Emotional Disturbance (SED)*

One of the disabilities defined in IDEA is that of “seriously emotionally disturbed.” IDEA uses the term SED (or sometimes simply ED) to describe a condition “marked by one or more of the following characteristics over a long period of time and to a significant degree that adversely affect a child’s educational performance:

1. An inability to learn which cannot be explained by intellectual, sensory, or health factors.
2. An inability to build or maintain satisfactory interpersonal relationships with peers and teachers.
3. Inappropriate types of behavior or feelings under normal circumstances.
4. A general pervasive mood of unhappiness or depression.
5. A tendency to develop physical symptoms or fears associated with personal or school problems”. (PL 94-142)

Another category for special education qualification, “other health impaired,” is closely connected with SED. This category includes impairments due to “chronic or acute health problems,” including attention deficit disorder (ADD) and attention deficit
hyperactivity disorder (ADHD) (PL 94-142). Students with a diagnosis of ADHD or ADD may exhibit disorders of emotional disturbance, but their diagnosis of ADHD is sufficient for them to qualify for special education services (Bateman & Bateman, 2001). Therefore, students who could qualify for services as SED may not be labeled as such due to what is considered their primary diagnosis and qualifying disorder.

This confusion may occur with traumatic brain injury and cognitive delay as well, which are each qualifying disorders, but students may end up qualifying for special education services under the label of traumatic brain injury, SED, or OHI, depending on what their primary diagnosis is and therefore their qualifying disorder. This confusion occurs in part because a child study team may not feel comfortable labeling a student as “emotionally disturbed” due to the negative connotations, when they know a student can qualify for special services with a less controversial label of “other health impaired.”

Confusion also may occur because the child study team has to work with the data they are presented and this includes relying on diagnoses from medical personnel, which may or may not include all of the possible disorders and diagnoses the child exhibits.

**Severe Problem Behavior Students**

Due to this confusion, this study considers SED students to be grouped with other students who display Severe Problem Behavior, whether or not this is the disorder that qualifies them for special education services and whether or not they are currently qualified for special education at all. This generalization is supported in the literature, as educators associate SED students with attention deficits, immature behavior, anxiety, low academic achievement, social skills deficits, depression, aggression, antisocial behavior, and/or disorder thinking, regardless of their official label or lack of label (Knitzer,
Steinberg, & Fleisch, 1990). All of these behaviors can also be termed Severe Problem Behavior (SPB).

**Referral and Identification of SPB Students**

Researchers point out that “any education professional today would likely say that for every student identified as having an emotional or behavioral disorder, there are two more with the same behavioral profile” (Keenan, 1994, p. 7). Not only do schools under identify children with emotional disturbances, schools also misidentify SED students, placing them under other IDEA categories (Bazelon Center for Mental Health Law, 2003; Hunter, et al., 2005). Behaviorally at-risk students are referred to and receive services well after the most effective age for remediation (Walter & Horner, 1996; BCMHL, 2003). Until this pattern in changed, the SPB population both for schools and society will continue to be problematic and expensive (Walter & Horner, 1996; BCMHL, 2003).

Considering all students who exhibit disturbing, troubling, or challenging behavior that requires intensive intervention as SED can be helpful to educators trying to meet such needs. In addition, it is important to keep in mind that SED students may or may not be diagnosed and may or may not be identified as or receiving special education (Weintraub, 1998). These students may be minorities, living in poverty, or disabled, or none of these things; what they do have in common is severe problem behaviors (SPB) that are disruptive of both their learning and others’. Therefore, considering this group to be SPB students instead of those solely labeled and identified as SED is likely to allow schools to more accurately assess and educate students struggling in these ways (Sugai and Horner, 2004).
Schools hold a unique position in SPB students’ lives; for most, they are the most predictable, constant, normalized, and pro-social environment available (Walter & Horner, 1996; Hunter et al., 2005). In addition, researchers have shown that early intervention prevents delinquency, reduces teen pregnancy rates, contributes to school success, and teaches students about choices and consequences (Walter & Horner, 1996; Hunter, et al., 2005).

SPB Students as a Uniquely Challenging Population

Due to the mandates of IDEA and similar legislation, public schools are undergoing fundamental changes (e.g., Bullock & Gable, 1994; Fusarelli, 2004; McMurrer, 2008). The barriers between special education and general education continue to soften as schools shift from large amounts of pull out time to delivering interventions for any student needing additional support directly within the general education classroom (Gurian, 2002). SPB students continue to challenge educators as a distinct group requiring unique interventions (Cohn, 2001; Bullock & Gable, 1994). They are even seen as the group posing the greatest challenges to educators (Hunter, Hoagwood, Evans, Weist, Smith, Paternite, Horner, Osher, and Jensen, 2005). SPB students are not seen in the same light as students with other learning issues, such as those with learning disabilities (Guetzloe, 1994). And this distinct group continues to grow, with schools “now serving more students with complex problems (e.g., hungry, poor health, abused, unsupervised, suicidal, pregnant, violent, armed, bisexual, on drugs, neurologically impaired)” (Webber, 1994, p. 3). Webber (1994, p. 3) further points out that more and more students “have or are at risk for mental illness and more students are in need of social services than ever before” and many of these students are “abused or neglected
and live in fragmented living arrangements.” SPB students are the least accepted and least welcome students in the general education setting because they not only disrupt their own learning, but others as well (Walker, Ramsey, and Gresham, 2003; Guetzloe, 1994). Some teachers and administrators even fear SPB students (Walker, Ramsey, and Gresham, 2003; Guetzloe, 1994).

Teachers may hear about the disruptiveness of a SPB student and assume that they cannot be socialized and are a threat to the peace of general education classrooms and the school setting (Price, 1994). Teacher stress levels rise when faced with the challenges of inclusion (Maroney, 1994). Contributing to the problem is a shortage of skilled and knowledgeable personnel within schools to manage SPB students (Guetzloe, 1994). Teachers are least tolerant of noncompliant and/or aberrant behavior from students and feel unqualified to manage behavioral problems (Lewis, & Bello, 1994). Researchers point out that general educators become angry and frustrated when faced with disruptive behavior (Webber, 1994). A contributing factor to frustration towards SPB students is that teaching practices effective for other students may reduce some behavior problems, but are inadequate to meet the variety of needs of SPB students (Walker, Ramsey, and Gresham, 2003; Lewis & Bello, 1994). Referral time can cause problems for SPB students, as the disruptiveness of such a student will continue through the pre-referral, diagnosis, and referral process, creating great frustration for all involved as they wait for a solution. Teachers become frustrated with and can even resent the amount of time required for collaborative planning (Guetzloe, 1994). Some teachers are reluctant to part with traditional ways of educating (Callahan, 1994). In addition, not all teachers work well in a collaborative process, especially without training (Guetzloe, 1994).
Inclusion for SPB Students

Inclusion requires “commitment between general and special education, careful ongoing systematic planning, data-based decisions made on a child-by-child basis, [and] flexibility at multiple levels” (Feldman as cited in Lewis & Bello, 1994). Inclusion can also be considered a commitment by educators to educate all students with and without disabilities, as well as those who are identified and not identified (Guetzloe, 1994). Some researchers find the concept of full inclusion for SPB students to be “ludicrous” (Webber, 1994). However, most research has found that inclusion supported by appropriate resources for all stakeholders can achieve satisfactory outcomes (Eber, Nelson, & Miles, 1997; Hunter, et al., 2005).

Researchers have found success in educating SPB students by providing services with a “wraparound” approach; this approach is one of collaboration with community resources, outside agencies, families, and the school (Eber, Nelson, & Miles, 1997). In this model, students are not moved to receive services; instead, services are provided in the most natural settings for the students (Eber, Nelson, & Miles, 1997). An example of this is the Comprehensive School and Community Treatment (CSCT) model, where a licensed therapist and assistant are housed on school property, though not employed by the school, so that SPB students can access the therapy they need without having to be driven off campus. This type of service delivery can be designed so that it is not limited to only students in special education or those labeled officially as SED, but open to all students who exhibit strong signs of developing SPB (Eber, Nelson, & Miles, 1997).

One study found that the most successful approach to educating SPB students was a comprehensive change in meeting their needs (Nelson, 1996). Along with school-wide
changes in classroom management interventions, teachers were taught behavioral interventions, including ecological factors, longitudinal programming, focused interventions, and disciplinary responses. The changes also included an advisory committee, including parents, to direct the changes. Researchers defined success through both a lowering in administrative disciplinary actions and a pre-test/post-test school climate survey. They found that there was a significant decrease of disciplinary actions resulting in a decrease of 40% in the number of suspensions and a decrease in expulsions and emergency removals of students (Nelson, 1996). Interestingly, though teachers were positive about the changes in their schools, student achievement increased, and disruptive behavior decreased, teacher stress levels did not decrease with the changes (Nelson, 1996).

SPB students may benefit from a very structured environment, which may not be present in the general education classroom (Bateman & Bateman, 2001). In addition, some of the services SPB students may require cannot be provided within the regular classroom, such as therapy or social skills role playing. However, when students are in the general education classroom, they are learning social skills by being with their peers (Bateman & Bateman, 2001). Students in inclusive schools describe increased self-esteem, school success, and confidence (Bateman & Bateman, 2001). In classrooms where teachers use high-quality instruction and relevant curriculum, behavior problems of SPB students decrease (Hunter et al., 2005).

Inclusion is difficult in general, and inclusion of SPB students is an even more challenging task facing today’s educators; given the significant benefits of inclusion for individuals and society, what does research suggest for schools wishing to meet this
challenge? Principals faced with student achievement requirements for all disaggregated groups as well as their entire student body need solutions that will address the needs of the most struggling children and also provide for a safe and non-disruptive learning environment for students who are not struggling. Positive Behavior Supports (PBS) promises just that; a three-tier system that will meet the social/emotional needs of all students, and therefore help principals create schools that are safe and welcoming learning environments focused on meeting instructional goals.

**Positive Behavior Supports**

Though schools have been historically reactive, they have a crucial role to play in developing proactive responses to the societal changes evidenced in the growing presence of SPB students in their halls (Walker & Horner, 1996). Schools hold a unique position in the quest to address this problem, as they alone have access to the majority of SPB students in their early years as well as the ability to pull together the array of necessary resources (Walker & Horner, 1996; Hunter et al., 2005). To do so, however, demands significant changes in how schools educate SPB students, including their attitudes towards this population (Walker & Horner, 1996). One such change is to replace the practice of relying on exclusion, suspension, and expulsion to manage chronically disruptive students with a school-wide plan including a continuum of interventions and placements (Hunter et al., 2005; Walker & Horner, 1996; Keenan, 1994). School communities must accept that all children can learn and that all children should be as much a part of their school and class as possible and a crucial component to creating such a school community is a building administrator accepting of SPB students and well-informed about their needs in the school setting, as well as practiced in managing their
behavior (Guetzloe, 1994).

**Severe Problem Behavior**

There is no longer a debate that public school educators must address violent and disruptive behavior due to the concerns over school safety relationship between academic failure and poor social adjustment (Nelson, 1996). Antisocial behaviors and aggression that are not dealt with early in a student’s life can affect the student’s school climate throughout his/her school years, as well as lead to delinquent and violent behavior as a young adult (Walker & Horner, 1996). The National School Safety Center offers a checklist of characteristics of youth who have caused school-associated violent deaths. It is not surprising that the list includes many characteristics associated with SED students, such as tantrums, uncontrollable angry outbursts, habitual name calling, violent threats, no close friends, little or no supervision and support from family, witness or victim of abuse or neglect, depression and significant mood swings (NSSF, 1998). Regardless if the students are labeled SED or qualifying for special education support, the resulting behaviors are not conducive to a learning environment.

**SPB and Positive Behavior Supports**

Inclusive education requires a team of stakeholders who are creative and flexible, as well as trusting of other stakeholders (Maroney, 1994). Training is necessary for all stakeholders, including administrators and parents (Heflin, Boreson, Grossman, Huette, & Ilgen, 1994). Koller and Bertel (2006) examined certification requirements mandated by several accrediting bodies, including the National Council for Accreditation of Teacher Education and the National Policy Board for Educational Administration, and found that teachers and administrators receive little training in how to identify mental
health issues in students, such as depression, stress, and anxiety. It is likely that if teachers and administrators are not being adequately prepared to identify such issues, they are also not properly prepared to educate students with the troubling behavioral and social/emotional problems associated with such mental health issues. Administrators must ensure that efforts are not hindered by funding, legal issues, or attitudes (Maroney, 1994). Negative administrator attitudes towards SPB students are a significant barrier to inclusion (Callahan, 1994). The literature shows that a “lack of administrative support will greatly impede any efforts to include [SPB] children and youth…in general education classrooms” (Lewis & Bello, 1994, p. 14).

Negative teacher attitudes are a significant barrier to inclusion (Callahan, 1994). However, there is evidence that given appropriate information and training, general educators can effectively teach SPB students (Lewis & Bellow, 1994). In addition, teachers may need emotional and instructional support from their administrators (Maroney, 1994). Teachers tend to be autonomous and need encouragement and training to manage SPB students, including mentoring programs (Heflin, Boreson, Grossman, Huette, & Ilgen, 1994). Training for teachers can include topics such as avoiding power and control struggles, crisis intervention, and restraint training (Keenan, 1994; Heflin, Boreson, Grossman, Huette, & Ilgen, 1994). Best practice is to protect SPB students from receiving harsher punishments that might be avoided if “other alternatives” can be developed (Webber, 1994).

Nelson (1996) advocates for administrators to establish school-wide policies and practices that create a school climate conducive to learning, such as those collectively termed PBS. These PBS should include staff development specific to the needs of the
school, similar to curriculum issues. Social adjustment and academic performance of students with disruptive behavior can be improved through universal strategies and interventions as opposed to developing only individualized intervention programs (Nelson, 1996; Keenan, 1994). In addition, such programs create a school environment flexible enough to be both preventative and remedial (Nelson, 1996; Hunter et al., 2005). Implementing such a program is more attractive to teachers than implementing numerous individualized interventions (Nelson, 1996).

The change necessary to address this challenging sub-group is not a one-time event, but a process. In a 2001 study looking at how to sustain change targeted at providing student interventions within both general and special education over a multi-year period, researchers found that the top reasons teachers learn and implement new strategies included that a workshop was available, someone came and demonstrated the new strategy, materials were provided and teachers saw the strategy implemented in another classroom (Klingner, Arguelles, Hughes, & Vaughn, 2001). Every one of these reasons depends on resources allocated by the principal: searching out professional development, providing it to the school, organizing further demonstrations, purchasing materials, and providing release time from teaching duties for observation. In addition, the researchers concluded that “lasting change is facilitated when principals . . . make their expectations clear regarding the instructional practices they would like teachers to use” as well as providing their teachers with research, resources and the flexibility necessary to modify to meet student and teacher needs (Klingner, Arguelles, Hughes, & Vaughn, 2001, p. 232). The researchers chose to look at situations where principals had decided that the changes in delivering instruction to benefit both general and special
education students was important, however, they did not study the effect of leading such change on the principals themselves. Nettles & Harrington (2007) urge researchers to investigate the relationships between principal leadership and student achievement in as much detail as possible, in order to inform schools and their leaders as they strive to meet instructional responsibilities. Principal leadership is critical to implementing a school-wide change such as PBS.

_History of Positive Behavior Supports_

In 1990, Horner and colleagues coined the phrase positive behavior support (PBS) to refer to nonaversive behavior management procedures (Johnston, Foxx, Jacobson, Green, and Mulick, 2006). Later, in 1999, Carr and colleagues referred to the PBS approach as interventions that altered deficient environmental conditions or addressed deficiencies in behavior/social skill knowledge and use (Carr, Levin, McConnachie, Carson, Kemp and Smith, 1999). By 2002, Carr and colleagues were describing PBS as an applied science using educational methods to address an individual’s lacking behavior repertoire in order to improve that person’s quality of life and to minimize problem behavior (Johnston et al., 2006). The development of PBS was encouraged by a US Department of Education National Institute on Disability and Rehabilitation Research grant of over $600,000 from 1987 to 1992 to a consortium of universities, including the University of Oregon, the University of California at Santa Barbara, the State University of New York at Stony Brook, the University of Minnesota, and the University of South Florida (Johnson et al., 2006). The strategies researched by the Center created through the afore-mentioned grant were complemented by the Office of Special Education (OSEP) Center on Positive Behavioral Interventions and Supports (PBIS), whose participants
include the Universities of Oregon, Kansas, Kentucky, Missouri, Florida, North Carolina, and South Florida; the Center of PBIS has been a prime factor in making the term “PBS” common language among educators and researchers (Johnston et al., 2006). PBIS has an active website (www.pbis.org) and two international conferences have been held on PBS, one in 2003 and one 2005. In 1999, the Journal of Positive Behavior Interventions began publishing descriptive and experimental studies, and the journal continues to publish current studies on the topic of positive behavior interventions and support. In Kansas, PBS services are even covered by Medicaid (Freeman, Smith, Zarcone, Kimbrought, Tieghi-Benet, and Wickham, 2005).

Some claim that PBS is only useful for students with disciplinary problems, but others claim PBS can be used for a wide variety of social/emotional issues, including autism, victims of abuse, aggression, pica, property destruction, at-risk and adjudicated youth, and self-injury (Johnston et al., 2006). Some researchers express concern that PBS emphasizes values as part of its approach to services, such as dignity, normalization, inclusion, person-centered planning, and self-determination; the concern is not with the values, but the risk that clinical decisions may be based on cultural values than research findings (Johnston et al., 2006).

The treatment model central to PBS is its use of the Functional Behavior Assessment (FBA), an assessment used by other treatment models as well. Based on direct observation by trained staff, the FBA establishes an antecedent, behavior, and consequence for the student’s behavior; these data are primary to decision-making regarding interventions for the student in question (Carr and Sidener, 2002). The treatment model also includes the strategy of supports, which includes adjusting the
environment to provide accommodations for struggling students. Using supports is a strategy designed to bolster situations and environments lacking in trained professional staff; therefore, this strategy is attractive to consumers such as schools, but worrisome to some practitioners and professionals, such as disability service providers (Johnston et al., 2006). A further concern of mental health researchers is that though there have been numerous studies on PBS, only a few studies have employed experimental designs and longitudinal methods; the majority of research available on PBS is more descriptive in nature, including interviews, surveys, checklists, and rating scales (Johnston et al., 2006). Due to these concerns, it is necessary to consider PBS an evolution in service delivery rather than a new applied science; a social movement rather than a professional discipline (Wacker and Berg, 2002).

Regardless of the exact terminology used, PBS has had remarkable success in becoming widely employed in only 18 years since the term’s inception. Johnston and colleagues (2006) cite several possible reasons for this success, including politically involved leadership, pursuit of federal funding, focus on dissemination, a service model adapted to market interests, operational features adapted to agency limitations, minimization of technical vocabulary, and organizational focus on service delivery. If they have reviewed the literature, is not hard to see why Boards of education, school districts, and local schools all find PBS an attractive strategy to employ to deal with the many challenges facing their communities, administrators, teachers, and students.

**Critical Components of PBS Systems**

PBS consists of the “application of positive behavioral intervention and systems to achieve socially important behavior change,” usually organized in a three tier
framework (Sugai, Horner et al., 2000, p. 133). The first tier includes the whole school through primary prevention, the second to addresses at-risk students through secondary prevention, and the third to addresses high-risk students through tertiary prevention (Luiselli, Putnam, Handler, & Feinberg, 2005). At-risk and high-risk students are those exhibiting chronic and/or severe problem behavior or signs of developing such behavior. The positive behavioral interventions and systems have six critical components, as defined by Luiselli, Putnam, Handler, & Feinberg, 2005, p. 184, based on their review of the research:

“(1) setting consensus-driven behavior expectations;
(2) teaching critical interpersonal skills;
(3) providing systematic positive reinforcement for meeting and exceeding performance criteria;
(4) monitoring intervention efficacy continuously through data collection and analysis;
(5) involving all stakeholders in the formulation of discipline practices, and
(6) reducing and eliminating reactive, punitive, and exclusionary strategies in favor of a proactive, preventive, and skill-building orientation.”

The first tier, primary prevention, includes establishing school-wide behavior norms that (a) exist in all settings, classrooms, hallways, playgrounds, and so on, (b) are directly taught and (c) are reinforced and rewarded (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). Schools may create tier one using copyright programs such as Second Step or Love and Logic, or craft their own models.
The second tier, secondary prevention, addresses student exhibiting signs of chronic, severe, or disruptive behavior. Students behaving outside established norms are disciplined, yet PBS models demand that first it is necessary to establish if these behaviors are due to skill deficits. If they are PBS models seek to repair the deficit through education, such as social skills small group instruction lead by a school psychologist or counselor (Luiselli et al., 2005; Sugai & Horner, 2004).

The third tier addresses students exhibiting chronic, severe, and/or disruptive behavior. Strategies at this level may include giving students credit towards graduation for using school time to meet with a licensed therapist (Luiselli et al., 2005; Sugai & Horner, 2004). Researchers recommend a continuum of mental health and educational services be available to second and third tier students, including “general education classrooms, self-contained classrooms, day schools, day treatment, and partial hospitalization programs” as well as curriculum addressing “behavior management, social skills training, academic remediation, self-control, and affective development” (Webber, 1994, p. 4). Collaboration between schools and outside agencies such as mental health and juvenile justice agencies are deemed critical (e.g. Lohrmann-O’Rourke, Knoster, Sabatine, Smith, Horvath, & Llewellyn, 2000; Sugai & Horner, 2004; Webber, 1994). Researchers urge that schools ensure a full range of mental health services for second and third tier students as well as their families, preferably in or around the school (Luiselli, Putnam, Handler, & Feinberg, 2005; Webber, 1994; Lewis & Bello, 1994). Services need to follow the child, not only be implemented in segregated settings (Freeman, Eber, Anderson, Irvin, Horner, Bounds, & Dunlap, 2006; Bateman & Bateman, 2001; Lewis & Bello, 1994).
There are logistical difficulties in providing related services, including scheduling and transportation, which can impede access to these services (Guetzloe, 1994). Inclusion for at-risk and high-risk students should be carefully planned, and should include a variety of agencies as appropriate (Lohrmann-O’Rourke et al., 2000; Freeman et al., 2006; Maroney, 1994; Sugai & Horner, 2004). The agencies available in the community should be identified and evaluated, including their ability to work as a team with the school and parents (Maroney, 1994; Sugai & Horner, 2004).

Students should be directly taught social skills, both those useful in society and those necessary to school success; this instruction needs to occur for all students (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). Stakeholders, such as teachers, administrators, and counselors, need to use data-based decision-making, hopefully originating with functional behavior assessments in order to accurately assess the cause of the problem behavior so that the interventions chosen are appropriate (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). Appropriate behaviors, those that meet school and societal norms and expectations need to be recognized and reinforced using both external and internal reinforcement (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). For a list of all of the features necessary to school-wide PBS, see the Effective Behavior Supports Survey (Appendix A). The Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2003) lists the several dozen features critical to PBS as part of the survey.

*Results of PBS*

In one longitudinal study, researchers tracked the rate of suspensions in an urban elementary school of approximately 600 students beginning the year before implementing
PBS and then for two years following implementation. Researchers found that student discipline problems decreased and academic performance increased, and staff felt the school discipline plan was effective and student learning time was protected (Luiselli, Putnam, Handler, & Feinberg, 2005). Another case study, in a non-urban elementary school, found after two years of PBS implementation resulted in a 19% decrease in office discipline referrals, a 23% decrease in office visits resulting in discussion of behavior problems, a 30% decrease of office timeouts, a 12% decrease of in school suspensions, and a 60% decrease in out of school suspensions of five days or less (Turnbull et al., 2002). A three year case study in an urban high school found a 20% reduction in office referrals, and a significant reduction in serious disobedience of authority (from 1.64 per every 100 students to .05 incidents per 100 students) as well as in dress code violations (from 26.63 per every 100 students to 8.39 per 100 students) (Bohanon, et al., 2006). It is case studies such as these that have caused PBS to become a strategy worth considering for leaders who must deal with student behavior and protect instructional time in order to meet student achievement demands.

The Relationship between PBS, Student Achievement, Severe Problem Behavior, and Administrative Stress

A review of the literature showed that the job of a principal is one of high stakes and high stress, particularly in the area of accountability for student achievement. The literature also showed that maintaining safe and welcoming schools is one of the most challenging, and therefore stressful, demands put upon today’s principals. Furthermore, the literature showed that job stress can lead to high costs for individuals and their organizations, including health care and turnover. The literature also pointed to the power
of PBS to maintain a safe and welcoming school and also to increase time and energy for the instruction necessary to meet accountability demands. The goal of this study was to investigate the relationships between these issues, specifically whether implementing PBS was associated with increased student achievement, decreased severe problem behavior, and decreased administrative stress. The last section in this review of the literature examines the survey instruments used to measure the presence of PBS, high v. low administrator job stress, as well as a summary of the review of the literature.

Survey Instruments

The survey for this study consisted of two previously created and validated surveys as well as questions relating to student achievement, severe problem behavior, and participant variables. As student achievement was defined as “made” or “did not make AYP” in the previous academic year in the areas of reading, math, attendance, and graduation, the survey included simple multiple choice questions addressing these areas. Similarly, severe problem behavior was addressed through simple multiple choice questions regarding rates of suspension/expulsion. Detailed explanations of these questions, along with participant variable questions and explanations can be found in the Methodology section of this paper. Reviewed next are the portions of the survey based on two previously created surveys, the Effective Behavior Supports Survey and the Administrative Stress Index.

Effective Behavior Supports Survey

Sugai, Horner, and Todd originally developed the 43-question Effective Behavior Supports (EBS) Survey at the University of Oregon in 2000 and updated the survey in 2003. Sugai and Horner are currently the co-directors of the Positive Interventions and
Supports Center from the US Office of Special Education Programs, US Department of Education. They each currently focus their academic and professional efforts in the area of PBS and their research is cited in the majority of articles and studies on PBS and its various components. A Google Scholar search shows the research of Sugai and Horner as cited by hundreds of other studies in peer-reviewed journals, going back into the 1990’s and continuing to today. As the majority of the features considered as fundamental to PBS originate in the work of Sugai and Todd, this study sought to use their EBS Survey to assess the presence of PBS features in participant’s schools.

The EBS Survey is designed to be flexible enough to collect information from all stakeholders within a school or district, including counselors, teachers, parents, and administrators (Sugai et al., 2003). Most schools would use the survey to inform school improvement processes, and therefore the survey is designed to gather data from a variety of people involved in or affected by the school improvement process. Once summarized, survey results can be used for a variety of purposes, including annual action planning, internal decision making, assessment of change over time, awareness building of staff, or team validation (Sugai et al., 2003). Schools engaging in the school improvement process can use the tips at the end of the survey for developing an EBS Annual Action Plan.

The survey is designed to assess the presence of positive behavior support (PBS) systems in schools, and can be used for both initial and on-going assessment. If used for continual school improvement, the survey developers recommend conducting the survey annually, either at the end or beginning of the school year (Sugai et al., 2003). The survey can be used to assess both the current status and the need for improvement of four PBS systems. The four behavior support systems assessed are (a) school-wide discipline, (b)
non-classroom management systems, (c) classroom management systems, and (d) systems for individual students with chronic problem behaviors (Laxton, 2006).

For each feature of a complete PBS system, participants rate the current status as “in place,” “partial in place,” or “not in place.” The percentage of PBS for each status level can then be calculated. If the survey is to be used for school improvement, participants can also note the priority for improvement next to each feature, choosing from “high,” “medium,” or “low” priority.

The four behavior support systems assessed are based on the conceptual framework of PBS, described in detail above, which includes applied behavior analysis, teaching acceptable norms of social behavior, the normalization/inclusion of people with disabilities, person-centered planning, self-determination, and involving the entire family system and a support system (Carr & Sidener, 2002; Rentz, 2007). The conceptual framework of PBS, and therefore the EBS Survey, is based on the principles of operant psychology, including teaching acceptable social behavior (Rentz, 2007). The psychometric characteristics of the EBS are examined in the Methodology section of this study.

The researcher used only the Current Status assessment portion of the EBS Survey. The other portion of the EBS Survey is only necessary when developing a plan of improvement, which was not a focus of this study. Use of the Current Status assessment portion of the EBS Survey allowed the researcher to establish the participants’ perceptions of the status of PBS in their schools as “in place,” “partial in place,” or “not in place.” The data from this survey allowed for analysis of the relationships between administrative stress levels, student achievement, severe problem behavior, PBS, and
participant variables.

*Administrative Stress Index*

The 35-item Administrative Stress Index (ASI) was designed by Boyd Swent and Walter Gmelch in 1977, originally to examine the sources of job-related stress for school administrators in Oregon. The foundation of the ASI was the Job-Related Strain Index developed by Indik, Seashore, and Slesinger in 1964. Swent and Gmelch added to this foundation by reviewing publications for school administrators and week-long stress logs gathered from forty school administrators. Swent and Gmelch asked administrators to record the single most stressful incident and most stressful series of related events for each day. Using these data, the researchers created the first version of their Administrative Stress Index, which they then field-tested to check reliability, content validity, and clarity. After this first round of field-testing, the researchers made revisions and tested the index on a second group of practicing administrators. Reliability coefficients of .70 for internal consistency were obtained. The researchers increased internal validity by designing the instrument to specifically address the stress of school administrators. Over 1,100 Oregon school administrators responded to the request for participation in the original study that the index was designed for, including vice principals, principals, superintendents, and central office administrators. The validity of the ASI was measured and no significant differences in sample distributions due to age, position, or number of years of administrative experience were found (Monroe, 2007).

The Administrative Stress Index has since been used and adapted for numerous studies, including studies on sources of stress in academe, department chair stress, and coping effectiveness. Monroe (2007, p. 25) describes the five categories of stressors
classified by the ASI, ranked most stressful to least stressful as follows:

1. Administrative constraints pertained to stress derived from meetings; frequent interruptions; time restraints; heavy workloads; and compliance with organizational policies, governmental rules, and regulations.

2. Administrative responsibilities related to job tasks such as supervision, coordination, evaluation, negotiations, budget, preparation, report writing, and public relations.

3. Interpersonal relations focused on communication with staff; handling conflicts; and resolving differences among parents, school staff, students, and superiors.

4. Intrapersonal conflicts centered on the discrepancy between performance and one’s internal beliefs, attitudes, and expectations pertaining to self-confidence; self-imposed expectations; social expectations; and making decisions which affect the lives of others.

5. Role expectations concentrated on differences between self-expectations and the expectations of all the groups the administrator must serve (students, parents, boards of education, members of the community, supervisors, and colleagues) and included such stressors as unclear job descriptions, lack of feedback, and dealing with conflicting demands.

The ASI is a Likert-scaled survey instrument with 35 items and six possible answers for each item. The responses for each item range from Not Applicable (0) to Frequently Bothers Me (5). The items on the ASI can be clustered in five groups of stressors, categorized as (a) administrative constraints, (b) administrative responsibilities,
(c) interpersonal relations, (d) intrapersonal conflicts, and (e) role expectations. Therefore, it is possible to gather a score between 0 and 35 for each cluster, as well as the total score for the ASI, equal to the sum of the values for each of the 35 items in the survey. The range of overall scores is 0 to 175. The Administrative Stress Index allowed the researcher to establish participants’ levels of overall job stress as low, moderate, or high, as well as to establish participants’ levels of job stress within each cluster as low, moderate, or high. The data derived from this particular survey was useful to this study as the survey was not a broad job stress survey, but one designed specifically for and by administrators. In addition, the survey collected information regarding both overall stress and the critical components of administrative stress, allowing for data analysis of many aspects of administrative stress. The data from this survey allowed for analysis of the relationships between administrative stress levels, student achievement, severe problem behavior, PBS, and participant variables.

Summary of the Review of Literature

The literature supported a study seeking to answer the question “What is the relationship between the presence of PBS, the amount of serious discipline problems, the numbers of students achieving Adequate Yearly Progress, and levels of principal job stress?” This study sought to show the relationship between status of PBS, level of student achievement, rate of severe problem behavior, and level of administrative stress, as was described in the review of the literature. The methodology of this study is described in the next section, Chapter Three: Methodology.
CHAPTER THREE: METHODOLOGY

Introduction

This chapter restates the focus of the study and the methodology employed to carry out the study. This chapter also includes the design, population, sampling procedures, instrumentation, validity and reliability, and data collection and analysis procedures used in this study.

Research Question

What is the relationship between the presence of Positive Behavior Supports, the amount of serious discipline problems, the numbers of students achieving Adequate Yearly Progress, and levels of principal job stress?

Restatement of the Problem

If universities wish to create successful leaders, school districts wish to retain successful principals, and principals wish to lead safe and successful schools, understanding the relationship between PBS, student achievement, severe problem behavior, and administrative stress is crucial.

This study investigated the relationship between PBS, student achievement, severe problem behavior, and administrative stress, as defined through the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2000), Adequate Yearly Progress (MONTANA OPI, 2008), suspension/expulsion rates, the Administrative Stress Index (Gmelch & Swent, 1977), and participant variables. This study specifically addressed the following research questions:

1. What status of Positive Behavior Supports do principals report?

2. What level of student achievement level, as defined by AYP status in reading, math,
attendance, and graduation rate do principals report?

3. What level of severe problem behavior, as defined by suspension/expulsion rate and compared to state average do principals report?

4. What levels of perceived job stress do principals report?

5. What is the relationship between the status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress?

6. What is the relationship between these variables and participant variables of gender, district size, school grade level, school poverty level, previous training/education, and years of experience?

Null Hypotheses

Null Hypothesis 1:

There is no experimentally important relationship between principals’ reported rates of PBS and principal’s reported perceived levels of job stress.

Null Hypothesis 2:

There is no experimentally important relationship between principals’ reported rates of PBS and principals’ reported rates of suspension/expulsion as compared to state average.

Null Hypothesis 3:

There is no experimentally important relationship between principals’ reported rates of PBS and principals’ reported rates of achieving AYP status in reading, math, attendance, and graduation rate.
Research and Design

The descriptive study utilized a survey to gather information regarding principals’ reported status of PBS, rates of suspension/expulsion, AYP status in reading, math, attendance, and graduation rate, and administrative stress. The study sought to assess the relationship between status of PBS, student achievement, severe problem behavior, and administrative stress.

The survey was developed based on review of previous research. The administrative stress portion of the survey was taken, with permission, from Dr. Gmelch’s Administrative Stress Index (see Appendix A for survey and Appendix B for permission). The PBS portion of the survey did not require permission, and was taken from the Effective Behavior Supports Survey by the Sugai et al. (2003) at the University of Oregon (see Appendix A). The survey asked for rates of suspension/expulsion and AYP status as reported by participants. The survey also asked for responses to participant variables of gender, district size, school grade level, school poverty level, previous training/education, and years of experience. The survey was developed to elicit data necessary to investigate the five research questions listed above; the data gathered through the survey sought to answer the first three research questions and the data were then analyzed to answer the last two research questions.

Target Population

The population for this study was all principals of public schools in the state of Montana ($N = 516$). The 2007-2008 Directory of Montana Schools (Montana OPI, 2007) was used to identify the principals and the Montana Association for Elementary and Middle School Principals and Montana Association for Secondary School Principals list
serves was used to contact the principals. The optimal response rate was $n = 221$.

Limitations

This study assumed that participants answered the survey instrument truthfully. This study also assumed that participants can accurately recall or retrieve AYP and suspension/expulsion data from the previous school year. This study included a survey that has been used for 30 years, the Administrative Stress Index; it is possible that the very stressors identified in this survey have since been addressed by universities and school districts by changing principal pre-service and in-service education and training. Such changes may have affected the accuracy of the levels of perceived stress gathered by the survey instrument.

Delimitations

The study was restricted to Montana public school principals. The study relied on a single survey instrument. The study did not involve other people involved in implementation of PBS, such as general education or special education teachers, therapists, counselors, superintendents, or parents.

Instrument Design

Five categories of independent variables were used in this study to determine the relationship between the variables. The categories were (a) respondent characteristics, (b), student achievement (c) severe problem behavior, (d) PBS, and (e) administrative stress.

Respondent Characteristics

The first part of the survey addressed the characteristics of the participants and helped to answer Research Question Six, the relationship between the other variables and
respondent characteristics. Respondent Characteristics sought were gender, district size, school grade level, school poverty level, previous training/education, and years of experience. Questions posed identified characteristics of principals and their schools identified in the literature as possibly related to levels of administrative stress, as well as possibly relating to success of implementing Positive Behavior Reports. Questions were either open response or multiple choice responses.

**Question 1**

The first question asked for the gender of respondent. This was a multiple choice question and was useful to this study in order to determine if there was a relationship between gender and the study variables.

**Question 2**

The second question asked for the respondent’s district size, and was a multiple choice question. Answers possible were based on Montana Office of Public Instruction district size categories as follows (MONTANA OPI, 2008): For Elementary Districts (districts not including any grade levels about grade 8):

- 1E more than 2500 students
- 2E 851 to 2500 students
- 3E 401 to 850 students
- 4E 151 to 400 students
- 5E 41 to 400 students
- 6E 40 or fewer students

For High School Districts (districts not including any grade levels below grade 9):

- 1H more than 1250 students
- 2H 401 to 1250 students
- 3H 201 to 400 students
- 4H 76 to 200 students
- 5H 75 or fewer students
For K-12 Districts (districts including grade levels kindergarten through 12):

1K more than 399 students  
2K 399 or fewer students

School size is a determinate of the types of roles school principals are asked to fulfill. The smaller the school, the fewer support services are available, and the more roles the principal fulfills. Larger districts are able to pool resources such as school psychologists and behavior specialists that could provide support for principals implementing PBS and therefore could have had a relationship with levels of PBS, administrative stress levels, or other study variables.

Question 3

The third question was a multiple choice question, and was designed to collect information on the grade level of the principal’s school. Choices were as follows:

(a) elementary (any combination of grades K-8, except schools with grades only above grade 5)
(b) junior high (any combination grades five through nine)
(c) high school (any combination of grades nine through twelve)

Currently, there is more research available on implementation of PBS in elementary schools. The imbalance may be because it is easier, more attractive, more crucial, or something else entirely to implement PBS in elementary schools. By collecting these data, it was possible to check the interference of grade level of school with other study variables.

Question 4

The fourth question was open response and was designed to collect the poverty level of the principal’s school, as defined by percentage of school population eligible for
free or reduced lunch. This population is often the sub-group within a school or district that does not make AYP, as can be ascertained by searching Montana’s OPI AYP database. In addition, this population is often associated with higher rates of social/emotional issues (e.g., McLeod & Nonnemaker, 2000). By collecting these data, it was possible to check the interference of poverty level with other study variables.

Questions 5 and 6

The fifth and sixth questions were multiple choice questions designed to collect information regarding principal’s previous training and education. Question #5 asked about participant’s previous education, defined as whether participants received their principal licensure in the Montana University system or elsewhere. This information checked the possible interference of where the principal received licensure on study variables. Question #6 asked participants to choose from the following choices regarding training, whether during licensure courses, after, or on the job, related to PBS, i.e., training related to the core components of PBS (participants could choose more than one):

(a) setting school-wide behavior expectations
(b) teaching critical interpersonal skills
(c) providing systematic positive reinforcement for meeting and/or exceeding behavior expectations
(d) monitoring behavior intervention efficacy continuously through data collection and analysis
(e) involving all stakeholders in the formulation of discipline practices
(f) reducing and eliminating reactive, punitive, and exclusionary strategies in
favor of a proactive, preventive, and skill-building orientation (Luiselli, Putnam, Handler, & Feinberg, 2005)

Questions 7 and 8

The seventh and eighth questions were open response, and were designed to collect information on principal’s years of teaching and administrative experience, respectively. This information was sought in order to check interference of years of experience with other study variables.

Student Achievement

The second portion of the survey sought to answer Research Questions Two, Five, and Six and asked principals to provide data regarding AYP status. The survey directed principals how to find these data through Montana Office of Public Instruction website in case they did not have the information available.

Questions 9, 10, 11, and 12

The ninth question asked for current (2007-2008 school year) status of AYP in the area of reading, a multiple choice response of either “made AYP” or “did not make AYP.” Question 10 asked for current (2007-2008 school year) status of AYP in the area of math, a multiple choice response of either “made AYP” or “did not make AYP.” Question 11 asked for current (2007-2008 school year) status of AYP in the area of attendance (for elementary and junior high schools), a multiple choice response of either “made AYP” or “did not make AYP” or “not applicable” (for high schools). Question 12 asked for current (2007-2008 school year) status of AYP in the area of graduation rate (for high schools), a multiple choice response of either “made AYP,” “did not make AYP,” or “not applicable” (for elementary and junior high schools). Each of these
questions also had a choice of “n too small to receive status.” This was necessary as the state will not report AYP status if the number (n) of students used to calculate a particular section of AYP is less than 40.

*Questions 13, 14, 15, and 16*

This next set of questions collected additional information on AYP status by asking principals to predict their AYP status in the 2008-2009 year. The questions asked principals if there were any areas they were not expecting their school to make AYP in the 2008-2009 school year. As the survey referred almost entirely to the 2007-2008 school year, yet was taken in the 2008-2009 school year, these questions asked principals about the “next time” AYP would be calculated in order to avoid confusion. Question 13 asked for a prediction regarding AYP in reading. Question 14 asked for a prediction regarding AYP in math. Question 15 asked for a prediction regarding AYP in attendance, for elementary and junior high schools. Question 16 asked for a prediction regarding AYP in graduation, for high schools. The questions were multiple choice questions, with the following possible answers for each: (a) Will make, (b) Will not make, and (c) n too small to receive status.

The data collected in this portion of the survey was designed to rate the level of student achievement in the participant’s school.

*Severe Problem Behavior*

The third portion of the survey sought to answer Research Questions Three, Five, and Six and asked principals to provide data regarding suspension/expulsion rates. The questions did not ask participants to calculate rates as this was computed by the researcher after the data were collected as follows.
Questions 17, 18, and 19

Question 17 asked for the number of students supervised by the participant in an open response question. Question 18 asked for the number of students suspended in the participant’s school in the past year in an open response question. Question 19 asked for the number of students expelled in the participant’s school in the past year in an open response question. Percentage of students suspended and expelled was then calculated by the researcher to be compared to the state average, available from the Montana Office of Public Instruction. This percentage represented the level of severe problem behavior in the participant’s school. This study sought to use suspension and expulsion data to represent the level of severe problem behavior as supported by Irvin, Tobin, Sprague, Sugai, and Vincent (2004) in their article investigating the validity of office discipline as indices of school-wide behavior status and effects of school-wide behavior interventions.

Positive Behavior Supports

The fourth portion of the survey sought to answer Research Questions One, Five and Six and asked principals questions regarding the presence of PBS in their school. This portion of the survey was taken directly from Sugai, Horner, and Todd’s Effective Behavior Supports (EBS) Survey copyrighted 2000 and updated in 2003. This survey instrument was used to evaluate the presence of PBS as rated “in place,” “partial in place,” or “not in place.” The survey allowed for results of a percentage of participants with each system of components of PBS in place, partial in place, or not in place in four areas: school-wide systems, non-classroom systems, classroom systems, and individual student systems. The survey itself is divided into these four sections. The survey also allowed the researcher to calculate an overall percentage of participants with PBS
components in place, partial in place, or not in place. Use of this survey did not require permission.

The EBS Survey is designed to be used to collect information from all stakeholders within a school or district, which was not necessary for this study. The instrument is also designed to collect information to allow for a school or district to create a plan of improvement. The original survey asks participants to rate each answer with both the presence of the support, as described above, and the priority for improvement. This second area of investigation was not necessary for this study, and therefore was not included in the final survey.

**Administrative Stress Index**

The fifth portion of the survey investigated Research Question One and provided data for Research Questions Five and Six. This portion of the survey was taken directly from Swent and Gmelch’s Administrative Stress Index instrument developed in 1977. This survey instrument was used to evaluate both the work-related activities perceived as stressful by elementary school principals as well as to produce an overall level of job stress.

The ASI is a Likert-scaled survey instrument with 35 items and six possible answers for each item. The responses for each item range from *Not Applicable* (0) to *Frequently Bothers Me* (5). The total score for the ASI is equal to the sum of the values for each of the 35 items in the survey, thus the range of scores is 0 to 175. The items on the ASI can be clustered in five groups of stressors, categorized as (a) administrative constraints, (b) administrative responsibilities, (c) interpersonal relations, (d) intrapersonal conflicts, and (e) role expectations (see Appendix D: Administrative Stress
Index Clusters of Stressors). Therefore, it is also possible to gather a score between 0 and 35 for each category. Participants answering primarily 0, 1, or 2 (Rarely or Never Bothers Me) in a particular cluster had a cluster score between 0 and 14, which is considered a score of low stress in that particular cluster. Participants answering primarily 3 (Occasionally Bothers Me) in a particular cluster had a cluster score between 15 and 27, which is considered a score of moderate stress in that particular cluster. Participants answering primarily 4 or 5 in a particular cluster had a cluster score between 28 and 35, which is considered a score of high stress in that particular cluster.

Participants answering primarily 0, 1, or 2 (Rarely or Never Bothers Me) had overall scores of 0 to 70, which is considered a score of low administrative stress level. Participants answering primarily 3 (occasionally bothers me) had overall scores between 71 and 139, which is considered a score of moderate administrative stress level. Participants answering primarily 4 or 5 had scores of 140 to 175, which is considered a score of high administrative stress level. The researcher obtained permission from Dr. Gmelch to use his instrument (see Appendix B).

Validity and Reliability

Feedback was obtained from the researcher’s Dissertation Committee and Chair regarding the clarity and appropriateness of the survey and its ability to meet the objectives of the study. Comments and questions were considered and appropriate changes were made. This process continued until the survey was submitted to the Institutional Review Board for approval. The Institutional Review Board of The University of Montana approved this study.
The survey for this study was developed using two already vetted survey instruments (EBS Survey and ASI). The validity and reliability of each survey is discussed below.

**Effective Behavior Supports Survey**

The EBS Survey was developed by Sugai, Horner, and Todd at the University of Oregon (2000) and updated in 2003. The survey is designed to assess the presence of positive behavior support (PBS) systems in schools. The survey assesses both the current status and the need for improvement of four PBS systems, though only current status will be used for this study. The four behavior support systems assessed are (a) school-wide discipline, (b) non-classroom management systems, (c) classroom management systems, and (d) systems for individual students with chronic problem behaviors (Laxton, 2006). For each question, participants rate the current status as “in place,” “partial in place,” or “not in place.” The presence of PBS components necessary for each system can then be calculated. The four behavior support systems assessed are based on the conceptual framework of PBS, which includes applied behavior analysis, teaching acceptable norms of social behavior, the normalization/inclusion of people with disabilities, person-centered planning, self-determination, and involving the entire family system and a support system (Rentz, 2007). The psychometric characteristics of the EBS were examined by Laxton (2006); he found the Current Status alpha coefficients to range from .82 to .95, demonstrating strong internal consistency. The EBS survey was used in a 2007 study with more than 27 anonymous and voluntary educator participants; the researcher found alpha levels between .82 and .90, indicating satisfactory internal consistency and reliability similar to Laxton, providing further reliability support (Rentz). Laxton’s factor
analysis suggest that while there is some overlap in the School-Wide Systems and Non-classroom Setting Systems, the Classroom Systems and Individual Student Systems constitute two very different systems of PBS (2006). His analysis of these results are that the factor analysis confirms the four-factor structure as designed by the authors, yet demonstrates the interrelated nature of the constructs within the factors. The internal consistency and clear factor structures provide support for validation of the EBS. Laxton also found significant and meaningful patterns of correlations with another widely used measure of school climate and safety with good internal consistency ratings, the Oregon School Safety Survey (OSSS); this provides further support for the EBS as a valid measure of the level of implementation of PBS in a school (Laxton, 2006).

Administrative Stress Index

The 35-item Administrative Stress Index (ASI) was designed by Boyd Swent and Walter Gmelch in 1977, originally to examine the sources of job-related stress for school administrators in Oregon. The foundation of the ASI was the fifteen-item index of Job-Related Strain developed by Indik, Seashore, and Slesinger in 1964. Swent and Gmelch added to this foundation by reviewing publications for school administrators and week-long stress logs gathered from forty school administrators. Swent and Gmelch asked administrators to record the single most stressful incident and most stressful series of related events for each day. Using these data, the researchers created the first version of their Administrative Stress Index, which they then field-tested on a group of 25 practicing administrators to check reliability, content validity, and clarity. After this first round of field-testing, the researchers made revisions and tested the index on a second group of 20 practicing administrators. Reliability coefficients of .70 for internal consistency were
obtained. The researchers increased internal validity by designing the instrument to specifically address the stress of school administrators. Over 1,100 Oregon school administrators responded to the request for participation in the original study that the index was designed for, including vice principals, principals, superintendents, and central office administrators. The validity of the ASI was measured; no significant differences in sample distributions due to age, position, or number of years of administrative experience were found (Monroe, 2007). The manner in which the ASI was developed supports its content validity.

Data Collection Procedures

The Montana Office of Public Instruction has listings for all Elementary, Middle School, and Secondary School Principals in Montana. This Directory was used to send a paper copy of the survey, along with a blank stamped return envelope, to participants at the end of August, 2008. There was an option given in the invitation to participate in the survey to access an anonymous on-line survey hosted by SurveyMonkey. Participants gave informed consent, accepted the terms of the study and completed the survey. The survey was available online for a total of eight weeks. After the survey was made available by mail, a follow up e-mail was sent using the School Administrators of Montana list serve; the vast majority of elementary, middle school, and high school principals belong to this list serve. After two weeks, the number of participants was checked. As it was less than the optimal response rate of 221, a follow up e-mail was sent. If 50% of the optimal response rate was not met within five weeks, a follow-up phone call was to be made to each principal listed in the Office of Public Instruction’s 2007-2008 Directory asking them to complete the survey. This was not necessary, as the
response rate was met.

Key ethical issues, as suggested by Creswell (1998) considered for this study lead to a conclusion that there were no ethical concerns for this study. The participants chose to participate only after reading and agreeing to an informed consent statement. This was a non-intrusive study, with no direct physical contact with participants, no potentially psychological disturbing survey questions, and no penalties for refusing participation, so harm to participants was not expected whatsoever. Privacy and confidentiality were preserved through the use of anonymous paper surveys and/or encryption of electronic transmissions (some survey results will be gathered electronically via SurveyMonkey Service) and safeguarding on the researcher’s computer, protected with McAfee Virus and Adware Safeguarding and Windows Firewall. No confidential information, whether known or inferred by the researcher, was shared with anyone other than the researcher’s dissertation chairman. All electronic and paper data from the study were stored securely by the researcher.

Data Analysis

The variables in the study were the respondent characteristics, levels of administrative stress and sub-categories, status of PBS and sub-categories, levels of severe problem behavior, and levels of student achievement. Status of PBS was the independent variable, while administrative stress, levels of severe problem behavior, and levels of student achievement were the dependent variables. These variables were coded and entered into a data base. A total of 35 variables were coded. Medians, standard deviations, and correlations were calculated from the relevant survey data. Computer analysis was conducted with GBStat. The Likert-type data gathered by two portions of
the survey was considered ordinal level data, as it cannot be assumed that the difference between each answer (i.e., agree/strongly agree and disagree/strongly disagree) is the same amount and therefore must be considered to be ranked data. Therefore, to be conservative, the non-parametric correlation coefficient (Spearman’s Rho) was used to identify the strength and direction of the relationships between all variables (Cozby, 2007).

Correlation coefficients were calculated for each of the variables to describe the strength and direction of the relationship between the variables. The experimental level of importance was set at 0.5. The critical level of statistical significance for the regression analysis was set at .05 level of confidence. Last, depending on the distribution of responses, further statistical procedures were applied to all variables appearing to be dichotomous, including discriminant function analysis.

Summary

This study was designed to examine the relationship between principals’ characteristics, administrative stress, levels of student achievement, levels of severe problem behavior, and status of PBS. The population of this study was public school principals in Montana. A survey was sent via paper and e-mail to all Montana elementary, middle, junior high, and high school principals. Data from this survey were analyzed to answer the research questions guiding this study.
CHAPTER FOUR: RESULTS

Introduction

This study investigated the relationship between PBS (PBS), student achievement, severe problem behavior, and administrative stress, as measured through the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2000), Adequate Yearly Progress (AYP) (OPI, 2008), suspension/expulsion rates, the Administrative Stress Index (Gmelch & Swent, 1977), and participant variables. This study specifically addressed the following research questions:

1. What status of Positive Behavior Supports will principals report?
2. What level of student achievement, as defined by AYP status in reading, math, attendance, & graduation rate, will principals report?
3. What level of severe problem behavior, as defined by suspension/expulsion rate and compared to state average, will principals report?
4. What levels of perceived stress will principals report?
5. What is the relationship between the status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress?
6. What is the relationship between these variables and participant variables of district size, school grade level, school poverty level, previous training/education, and years of experience?

This chapter covers the results and analysis of data collected during this study. The results are discussed in this chapter beginning with the response to the survey and a description of the subjects. This is followed by an analysis of each part of the survey data gathered, in the following order: respondent characteristics, student achievement, severe
problem behavior, PBS, and administrative stress index. An analysis of the correlations between each variable follows, and the chapter concludes with the testing of the null hypothesis.

Response to the Survey

A packet containing a request for participation and a copy of the survey, along with an addressed return envelope was mailed to all principals and supervising teachers listed in the Office of Public Instruction’s 2007-2008 Directory of Montana Schools. Originally, the intention was to mail surveys only to principals listed in the directory, but it was discovered there were several errors in the book, including some principals listed as supervising teachers and some supervising teachers listed as principals. The original intent of the study was to gather data related to being an educational leader, and the decision was made that the study would be impacted more negatively from excluding participants than including them. Due to the fact that people in a supervising teacher position in the small schools of Montana have nearly all of the same job requirements of a principal, with the exclusion of formal evaluation of certified staff, the decision was made to send the survey to supervising teachers as well. Interestingly, when observing the sizes of the schools of survey participants, it appeared almost no supervising teachers responded. Given the low number of non-principals who responded, the researcher continued to refer to the participants of this study as principals, as opposed to principals and supervising teachers.

However, due to this issue, the researcher changed the wording of one question on the survey to accommodate supervising teachers. The change also allowed for principals with provisional licenses to participate. The correction was made in the online survey and
the following statement was included on color coded paper with the paper surveys:

CORRECTION:
The CORRECT WORDING of question #5 on the first page of this survey should be as follows:

“I received my initial principal licensure (or teaching licensure if not a licensed principal)…”
Please select your answer based on the correct wording instead of how it is printed.

Thank you!

The mailed requests included an invitation to participate online with a link to SurveyMonkey provided and contact information for the researcher. The same day these surveys were mailed, an invitation to participate in the survey online was e-mailed to all members of the School Administrator’s of Montana (SAMMT) list serve. After two weeks, a request to participate in the on-line survey was e-mailed through the SAMMT list serve. Additionally, the researcher reminded fellow administrators of the chance to participate in the survey at the Montana Conference of Educational Leadership in October, 2008. Between September 6, 2008 and the last week in October, more than 250 people responded to the survey, either by mail or via the on-line survey. Several participants completed less than a quarter of the survey; these responses did not contain enough data to be used, and therefore the total useable surveys collected consisted of 147 online responses and 85 paper responses, for a total of 232 responses. The online surveys were collected anonymously, with no electronic data capable of tracing who sent the survey collected. The paper surveys were mailed back to the researcher in pre-addressed privacy labels, and the outer envelope with any return address or postmark data were removed from the surveys and separated prior to surveys being opened and read by the researcher. Therefore, all surveys were processed as anonymous. The online survey was
closed the last week in October.

The Montana principals who responded to the request for participation completed a survey consisting of five sections: Respondent Characteristics, Student Achievement, Severe Problem Behavior, PBS, and Administrative Stress Index. Nearly all principals responded to all sections; for some questions, such as those referring to graduation, not all principals could respond to the questions as they do not supervise that level. Out of 232 surveys received, 177 principals responded to all sections pertaining to their grade level; 55 did not respond to all sections, but did respond to more than 90% of the sections. Therefore, in each correlation set, if a respondent did not have a response to both variables, the response was discarded. Even after some responses had to be discarded, nearly all variables had 220 responses, which was the pre-determined optimal response rate. Means, modes, standard deviations, and sample sizes were reported for each variable. In order to make clear that each variable may have had a different sample size, the number of subjects will be included in the tables for each variable as appropriate.

**Respondent Characteristics**

The first section of the survey asked participants about themselves and the schools they supervised. Participants described the sizes of their districts, type of school, poverty level of school, their own educational background, and rates of suspensions and expulsions. Some of these data were compared to state data. The state-wide rates of suspensions and expulsions were figured from data provided by Montana Office of Public Instruction. On December 17, 2008, OPI reported via e-mail 11,190 out of school suspensions or expulsions for the school year 2007-2008. Out of the 11,190 disciplinary
actions, 149 of these were expulsions and 11,041 were out of school suspensions. The total number students reported for school year 2007-2008 was 143,405. All Montana schools are required to report these data to the Office of Public Instruction. These data lead to a state suspension rate of 7.7% and a state expulsion rate of 0.1%.

Montana Office of Public Instruction reported that males represented 58% and females represented 42% of the total principals and supervising teachers in Montana in their 2007-2008 Directory. Survey participants were divided 62% male and 38% female as shown below.

![Gender Distribution, Survey Participants Compared to State](image)

**Figure 1.** Gender distribution of survey participants as compared to state Office of Public Instruction data, expressed as percentage of total responses.

The participants provided a representative sampling of the demographics of Montana public schools, with 134 male principals and 83 female principals responding, as compared to the OPI data cited above.
Designations of district size are based on Montana Office of Public Instructions coding system. For Elementary Districts (districts not including any grade levels above grade 8):

1E more than 2500 students  
2E 851 to 2500 students  
3E 401 to 850 students  
4E 151 to 400 students  
5E 41 to 150 students  
6E 40 or fewer students

For High School Districts (districts not including any grade levels below grade 9):

1H more than 1250 students  
2H 401 to 1250 students  
3H 201 to 400 students  
4H 76 to 200 students  
5H 75 or fewer students

For K-12 Districts (districts including grade levels kindergarten through 12):

1K more than 399 students  
2K 399 or fewer students

![District Size Categories](image)

**Figure 2.** District size category frequency expressed as percentage of total responses.
The figure on the previous page shows the participants’ district size as designated by OPI’s coding system of district size, as described above. Another way of displaying these data allows for comparison to state data, and shows that the numbers of participants from certain size schools reflected the frequency in the state. This pattern can be seen in Figure 3 below.

![School Size Chart]

**Figure 3.** Participants’ school sizes as compared to state data, expressed as percentage of total.

Montana Office of Public Instruction reports the data regarding school size by percentage of the total student population in the state attending schools with various sizes of student enrollment. As shown in the figure above, 31% of Montana students attended schools of greater than 500 students and 64% attended schools of less than 500 students (OPI, 2008). Participants’ schools had a similar pattern of enrollment size: 65% of the students in participants’ schools attended schools of greater than 500 students, while 35% of the students in participants’ schools attended schools of less than 500 students.

In its most recent press release regarding facts about Montana schools, OPI reported a count of 445 elementary schools and 171 high schools (OPI, 2008). The report...
also covers poverty levels reported by Montana schools. The average poverty level from survey participants, as defined by percentage of students qualifying for free or reduced lunch status, with 211 of participants reporting was 39%; state average for the same school year was 35% (OPI, 2008).

<table>
<thead>
<tr>
<th>Types of Schools</th>
<th>Number Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>elem</td>
<td>107</td>
</tr>
<tr>
<td>JH</td>
<td>22</td>
</tr>
<tr>
<td>HS</td>
<td>37</td>
</tr>
<tr>
<td>elem &amp; JH</td>
<td>9</td>
</tr>
<tr>
<td>JH &amp; HS</td>
<td>16</td>
</tr>
<tr>
<td>elem &amp; HS</td>
<td>4</td>
</tr>
<tr>
<td>K-12</td>
<td>31</td>
</tr>
</tbody>
</table>

**Figure 4. Frequency of types of schools participants supervised, out of 220 total responses.**

Participants reported the type of school they supervised, and could select any one type or any combination of grade levels, choosing from elementary, junior high, high school, or K-12. There were more elementary principal participants than high school participants, 107 and 37 respectively. Using the OPI press release (2008), the researcher was able to determine what percent of Montana schools fell in the categories of K-8 schools and high schools. This was compared to survey participants’ school grade levels, as shown on the next page.
Figure 5. Participants’ school type compared to state data, expressed by percent of total.

OPI reported that for school year 2007-2008, 79% of the schools in Montana held students from grades K-8, whereas 21% of the schools held students grades 9-12. Survey participants reported that 79% of them supervised grades K-8, while 21% reported supervising grades 9-12. Participants who supervised grade level combinations of elementary and high school, junior high and high school, or K-12, a total of 22% of responses, were not included in this comparison, as these types of data were also not reported by OPI.

Participants were asked if their initial licensure came from the Montana University system or elsewhere. Supervising teachers were asked to respond regarding their initial teaching license, while principals were asked to respond regarding their initial administrative licensure. Again, very few participants from schools small enough to have only a supervising teacher responded; therefore, the responses to the licensure question were primarily regarding initial administrative licensure. Montana University system provides licensure in all types of elementary and secondary teaching, as well as principal licensure for both levels.
Participants primarily had received their initial licensure from within the state of Montana. More than twice as many principals reported initial administrative licensure from Montana Universities than elsewhere, as reported in Figure 6 above. There is no state data available to make a comparison.

Participants were asked if they had received training in areas related to Positive Behavior Systems. These areas were gathered from the Review of the Literature, as described in Chapters Two and Three. The six areas were training in the following: (a) setting behavior expectations, (b) teaching interpersonal skills, (c) providing positive reinforcement, (d) monitoring behavior intervention, (e) involving all stakeholders, and (f) reducing and eliminating reactive, punitive, and exclusionary strategies.
Regarding training in areas related to Positive Behavior Systems, 140 participants answered yes to four or more types of training out of six possible. The area of training with the least yes responses was teaching critical interpersonal skills, with 99 out of 232 responding yes; the area with the highest number of yeses was setting school-wide behavior expectations, with 183 of participants responding yes. The average respondent reported training in four of the areas of training. Above, Figure 7 illustrates the percent and number of participants answering “yes” to each type of training.

The average number of years of teaching experience was 14 years, while the average number of years of administrative experience was 10 years. There was, however,
a broad range of years of experience from participants, from participants in the first year of administration (reporting zero years of experience) up to participants reporting 38 years experience.

The average number of students supervised was 315, which again reflects Montana demographics; according to OPI (2008), 40% of Montana schools are between 100 and 400 students in size. The average number of suspensions reported by participants was 2%, which is below the state average of 7.7%, though the median suspension rate of participants was closer to the state average with 6%. Out of all participants, 31 reported suspensions above the state average. Out of this group of participants, 39% described their school as a high school and 23% described their school as an elementary. The average rate of expulsions reported was 0.2%, close to the state average of 0.1%; nine schools reported 1%, six schools reported 2%, two schools reported 3%, one school reported 7%, and all others reported zero expulsions.

**Student Achievement**

The next section of the survey covered student achievement data. Participants were asked to report whether their school made Adequate Yearly Progress in school year 2007-2008 in four areas, (a) reading, (b) math, (c) attendance, and (d) graduation. Participants were given a link to the Montana OPI website to access AYP status to help with accurate reporting. Participants were given three choices of responses, Made AYP, Did not Make AYP, and Too Small to Receive Status. Participants were also asked to predict their Adequate Yearly Progress for the 2008-2009 school year, as the criteria for obtaining AYP designation continues to change.
Participants’ Schools’ AYP Status, Reading and Math

![Bar chart showing AYP status for reading and math](chart.png)

<table>
<thead>
<tr>
<th></th>
<th>Did Make</th>
<th>Did Not Make</th>
<th>Too Small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>157</td>
<td>56</td>
<td>7</td>
</tr>
<tr>
<td>Math</td>
<td>135</td>
<td>89</td>
<td>7</td>
</tr>
</tbody>
</table>

**Figure 8.** Participants’ schools’ AYP status in reading and math.

Out of 232 total survey responses, 220 participants responded regarding reading status and 231 responded regarding math status. As shown in the figure above, more schools reported making AYP in reading than in math.

Percent Made AYP Reading and Math, Survey Compared to State

![Bar chart showing percent AYP](chart2.png)

<table>
<thead>
<tr>
<th></th>
<th>OPI</th>
<th>Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>81%</td>
<td>71%</td>
</tr>
<tr>
<td>Math</td>
<td>63%</td>
<td>58%</td>
</tr>
</tbody>
</table>

**Figure 9.** Participants’ reported AYP status for math and reading as compared to state data for same year, 2007-2008.
Out of all responses, 71% reported making AYP for reading and 58% for math, which is an accurate reflection of state trends, as shown in Figure 9 on the previous page. State averages for achieving AYP status for 2007 were 81% for reading and 63% for math (OPI, 2008). Participants were also asked to predict their AYP status for reading and math for the 2008-2009 school year, illustrated in the figure below.

![Participants' Predictions of AYP Status, Reading and Math](image)

**Figure 10. Participants’ predictions of AYP status next year for reading and math.**

Out of the total survey responses, 228 responded regarding prediction of next year’s AYP status in reading and 231 responded regarding prediction of next year’s AYP status in math. Most schools reported predictions of either maintaining AYP reading status or achieving it, as shown in Figure 10 above. Most schools reported maintaining AYP math status, with no predicted increase in achievement, as shown in Figure 10 above. Participants were also asked about their AYP status in attendance and graduation, as described on the next page.
Out of 232 total survey responses, 220 participants responded regarding attendance status and 127 responded regarding graduation status; therefore, these data are presented in two different figures. Only high school participants could respond regarding graduation, hence the smaller number of responses.

As shown in the figures above, more participants reported making AYP in attendance than in graduation; 92% of participants reported making AYP in attendance,
with 80% of participants reporting making AYP in graduation. These numbers are reflective of state trends, as shown in Figure 13 below.

![Bar chart showing percent made AYP for attendance and graduation, survey compared to state, 2007-2008.]

**Figure 13.** Participants’ reported AYP status for attendance and graduation as compared to state data for same year, 2007-2008.

OPI (2008) reported 94% attendance rates state-wide and 86% graduation rates state-wide in 2007. Participants were also asked to predict their AYP status for attendance and graduation for the 2008-2009 school year, as shown in the figures on the following page. Attendance and graduation data are presented in two different figures due to differences in total responses.
Participants predicted little change in either attendance or graduation status for next year, as shown in Figures 14 and 15. Participants predicted a slight increase in making AYP in attendance, while predicting no increase in making AYP in graduation.

As demonstrated in the AYP Status figures above, participants in all areas except future graduation status predicting their rates of success will go up. Out of the total responses, 2% of participants who did not make AYP math predicted making it next year; 2% who did not make AYP attendance predicted making it next year; and 15% who did
not make AYP reading predicted making it next year. Participants predicted no increase or decrease in making AYP in Graduation.

**Effective Behavior Supports Survey**

The next section of the survey asked participants about the presence of the components of a Positive Behavior System, as defined by Sugai, Horner, and Todd (2003). Participants were asked to rate various aspects of four overall components of a Positive Behavior System as in place, partially in place, or not in place. The four components were described as (a) school-wide systems, (b) non-classroom settings, (c) classroom settings, and (d) individual students systems. Each component was defined for participants at the beginning of each section. Principals rated their schools in 18 areas regarding school-wide systems, 9 areas regarding non-classroom settings, 11 areas regarding classroom-settings, and 8 areas regarding individual student systems. The data gathered allowed for rates of Positive Behavior System Components Present, as described below.

![Rates of Positive Behavior System Components Present](image)

**Figure 16. Participants’ Rates of Positive Behavior System Components Present**
The rate of each component “present” was figured by creating a dichotomy from participants’ answers. Participants’ answers were coded as either low or high, depending on their score on that system. For instance, the school-wide section had 18 questions, for a total high score of 36 possible, as participants received a 2 for marking in-place, a 1 for partially in-place, or a zero for not in-place. If a respondent had marked all answers with a one, that resulted in a score of 18; therefore, in this section, all scores of 18 or higher was considered a high rate of components present and scores of 17 or below were considered a low rate of components present. The same dichotomy of low versus high scores was applied to each system. For the classroom section, there were 9 components with 9 and above considered high scores; for the non-classroom section, there were 11 components, with 11 and above considered high scores; for the individual section, there were 8 components, with 8 and above considered high scores; for total components, there were 46 possible, with 46 and above considered high scores. These calculations allowed for a percentage of participants rating as low or high to be figured for each system of components, as well as an overall score. Out of 232 total survey responses, 223 participants responded to questions regarding the presence of Positive Behavior Systems in their schools.

The percentage for non-classroom settings components was the highest, at 95% of participants responding with a high rate of components present; the percentage for classroom setting and school-wide components were the next highest, at 88% and 87% with high rates of components present, respectively; individual student system components had the lowest percentage of participants with a high rate of components present, 70%; the percentage of participants rating high for all components present
combined was 85%. There was no way to compare these data to a state or national average as such data is not available.

*Administrative Stress Index*

In the last section of the survey, participants responded to questions regarding 35 stressors identified by Gmelch and Swent (1977). Participants rated the level of stress on a scale ranging from zero points to five points, deciding for each stressor if it was not applicable (0), rarely or never bothered them (1), occasionally bothered them (3), or frequently bothered them (5). Participants also could also choose the points between, two and four. These data were ordinal level, though the rubric designed for this inventory provides for analysis at the interval level; this resulted in the following analysis.

The responses were grouped within five clusters of stressors, including (a) administrative constraints, (b) administrative responsibilities, (c) interpersonal relations, (d) intrapersonal conflicts, and (e) role expectations. A table explaining how the questions are grouped into these clusters is in Appendix D. Cluster scores between 0 and 14 are considered low stress levels; scores between 15 and 27 are considered moderate stress levels; and scores between 28 and 35 are considered high stress levels. Overall scores were also computed, with scores between 0 and 70 considered low stress levels, 71 to 139 considered moderate stress, and 140 to 175 considered high levels of stress. Out of 232 total survey responses, 221 participants responded this portion of the survey.
Figure 17. **Mean rank levels reported on Administrative Stress Index.**

Participants’ responses to the Administrative Responsibilities cluster ranged from a score of 6 up to 29, with 73% of responses falling between 8 and 17; the mean and mode score was a 17. Participants’ responses to the Role Expectations cluster ranged from a score of 1 up to 30, with 84% of responses falling between 6 and 20; the mode was 15 and the mean was 13. Participants’ responses to the Interpersonal Relations cluster ranged from a score of 3 up to 30, with 88% of responses falling between 6 and 20; the mode was a 16 and the mean was 14. Participants’ responses to the Intrapersonal Conflicts cluster ranged from a score of 3 up to 32, with 82% of responses falling between 6 and 20; the modes were 14 through 16 and the mean was 15. Participants’ responses to the Administrative Constraints cluster ranged from a score of 6 up to 35, though 82% of responses fell between 12 and 26; the mode was a 21 and the mean score was 17. Overall administrative stress levels fell at the low end of the moderate stress range on the ASI, with an average rank score of 73. The range of overall scores was between 28 and 153, with 83% of responses falling between 42 and 97.
Table 1.

Levels on Administrative Stress Index: Mean Rank, Median Rank, and Range

<table>
<thead>
<tr>
<th>Stress Cluster</th>
<th>Median Rank</th>
<th>Mean Rank</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Stress Index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Admin. Responsibilities</td>
<td>13.5</td>
<td>13</td>
<td>6-17</td>
</tr>
<tr>
<td>Role Expectations</td>
<td>13</td>
<td>13</td>
<td>1-30</td>
</tr>
<tr>
<td>Interpersonal Relations</td>
<td>15</td>
<td>14</td>
<td>3-30</td>
</tr>
<tr>
<td>Intrapersonal Conflicts</td>
<td>15</td>
<td>15</td>
<td>3-32</td>
</tr>
<tr>
<td>Admin. Constraints</td>
<td>18</td>
<td>17</td>
<td>6-20</td>
</tr>
<tr>
<td>Overall Stress</td>
<td>74</td>
<td>73</td>
<td>28-153</td>
</tr>
</tbody>
</table>

The mean rank level of stress participants reported varied, as indicated by the table above. However, the mean rank levels of administrative stress were low, administrative responsibilities and role expectations rating in the low stress range, interpersonal relations and intrapersonal conflicts rating only one point higher and also in the low stress range, and only administrative constraints rating at the low end of the moderate stress range with a 17. Participants overall rank stress levels averaged at the low end of the moderate stress range, with a mean of 73.

Statistical Analysis of Correlations

Each of the variables detailed previously was combined as described in the following tables in order to ascertain the strength and direction of the relationship. The correlation statistic used was Spearman’s Rho, as the data were considered rank-order
data. If a respondent did not have a response for both variables in the correlation, they were not included in the calculation. All remaining variables were analyzed using Spearman’s Rho. Degrees of freedom and a p-value were also calculated for each correlation. These correlations were used as a screening procedure; all variables not meeting a Spearman’s Rho of .5 were considered to experimentally insignificant. Statistical significance was set at .05, and this test was applied to variables meeting the screening level. All findings were of no experimental importance, i.e., there were no statistically or experimentally significant correlations. However, one pattern did arise during this process. All combinations of variables including rates of Positive Behavior System Components present and Administrative Stress Index levels had a negative correlation, i.e., as rates of PBS went up, levels of on the ASI went down, though the correlation strength was too weak to pass the screening test. Discriminant function analysis was performed on all combinations of variables including Positive Behavior Systems or Administrative Stress Levels. All findings were of no experimental importance. For each combination of variables including Positive Behavior System data, the data were then subjected to further analysis.

Further Statistical Analysis of Positive Behavior System Variables

The data were analyzed to check for patterns amongst those participants with no components present, some components present, or 100% of components in that system present. For instance, the variables pertaining to the level of interpersonal conflicts stress and presence of school-wide system components were checked in this manner in order to determine the mean level of interpersonal conflict stress for participants reporting no school-wide system components in-place, some components in-place, or 100% of
components in-place. No experimentally or statistically significant relationships were found for any combination of administrative stress variables and Positive Behavior System variables using the aforementioned statistical procedures.

Other variables combined with Positive Behavior Systems were also examined to determine any significant differences between groups when participants’ responses were grouped as those reporting no system components in-place, some components in-place, or 100% of components in-place. There were no experimentally important relationships found for school size, school type, or AYP status.

The variables of levels of training in areas related to PBS were combined with participants with no components present, some components present, or 100% of components in that system present. The results are in Table 2 on the following page.
Table 2.  
*Rates of Positive Behavior System (PBS) Components In-place Compared with Amount of PBS Training.*

<table>
<thead>
<tr>
<th>Positive Behavior System</th>
<th>Percent of Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100% In-place</td>
</tr>
<tr>
<td><strong>Non-classroom Components</strong></td>
<td>9%</td>
</tr>
<tr>
<td>Percent of above with All 6 Types of Training</td>
<td>50%</td>
</tr>
<tr>
<td><em>Percent Difference</em></td>
<td></td>
</tr>
<tr>
<td><strong>Classroom Components</strong></td>
<td>20%</td>
</tr>
<tr>
<td>Percent of above with All 6 Types of Training</td>
<td>35%</td>
</tr>
<tr>
<td><em>Percent Difference</em></td>
<td></td>
</tr>
<tr>
<td><strong>Individual Student Components</strong></td>
<td>10%</td>
</tr>
<tr>
<td>Percent of above with All 6 Types of Training</td>
<td>52%</td>
</tr>
<tr>
<td><em>Percent Difference</em></td>
<td></td>
</tr>
<tr>
<td><strong>School-wide Components</strong></td>
<td>6%</td>
</tr>
<tr>
<td>Percent of above with All 6 Types of Training</td>
<td>57%</td>
</tr>
<tr>
<td><em>Percent Difference</em></td>
<td></td>
</tr>
<tr>
<td><strong>Total PBS Components</strong></td>
<td>2%</td>
</tr>
<tr>
<td>Percent of above with All 6 Types of Training</td>
<td>80%</td>
</tr>
<tr>
<td><em>Percent Difference</em></td>
<td></td>
</tr>
</tbody>
</table>
The first variable in these combinations was calculated by adding each type of training participants had taken. The types of training chosen were those related to PBS, as discussed in previous sections. Participants responding more yeses received higher scores on this variable, with six being the highest score possible. The second variable was the percentage of participants with no components present, some components present, or 100% of components in that system present for each system necessary for PBS, as determined in the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2003). In all cases, the number of cases with no components present was too small to consider, 1% or less; therefore, only those participants with 100% of components in-place or some components in-place are discussed.

The percent of participants with 100% in-place in each PBS system who also had the highest level of training was higher than those with only some components in-place in all cases. The greatest difference was for overall PBS components in-place, though that variable had only 2% of participants falling into the category of 100% in-place and is therefore of negligible importance. However, for participants with 100% components in-place, 22% to 33% more them had all six types of PBS training, depending on which PBS system was examined, as compared to those with only some components in-place.

Testing the Hypotheses

**Null Hypothesis 1:**

There is no experimentally important relationship between principals’ reported rates of PBS and principal’s reported perceived levels of job stress.

**Do Not Reject Null Hypothesis 1:**

A Spearman’s Rho and other statistical procedures were used to determine if an
experimentally important relationship existed between principals’ reported rates of PBS and principal’s reported perceived levels of job stress. The principals’ rates of PBS were measured by the Effective Behavior Support Survey. Principal’s job stress was measured with the Administrative Stress Index. Variables of overall PBS and overall Administrative Stress Index were checked, as well as each component of Positive Behavior Support and Administrative Stress Index. None of these variables met tests of experimental importance. As a result, the researcher cannot reject the null hypothesis.

Null Hypothesis 2:

There is no experimentally important relationship between principals’ reported rates of PBS and principals’ reported rates of suspension/expulsion as compared to state average.

Do Not Reject Null Hypothesis 2:

A Spearman’s Rho and other statistical procedures were used to determine if an experimentally important relationship existed between principals’ reported rates of PBS and principals’ reported rates of suspension/expulsion as compared to state average. The principals’ rates of PBS were measured by the Effective Behavior Support Survey. Variables of overall PBS and suspension/expulsion rates as compared to state average were checked, as well as each component of Positive Behavior Support and suspension/expulsion rates as compared to state average. None of these variables met tests of experimental importance. As a result, the researcher cannot reject the null hypothesis.
Null Hypothesis 3:

There is no experimentally important relationship between principals’ reported rates of PBS and principals’ reported rates of achieving AYP status in reading, math, attendance, and graduation rate.

Do Not Reject Null Hypothesis 2:

A Spearman’s Rho and other statistical procedures were used to determine if an experimentally important relationship existed between principals’ reported rates of PBS and principals’ reported rates of achieving AYP status in reading, math, attendance, and graduation rate. The principals’ rates of PBS were measured by the Effective Behavior Support Survey. AYP status was reported by participants as made, did not make, too small to report, will make next year, and will not make next year. Variables of overall PBS and rates of AYP achievement were checked, as well as each component of Positive Behavior Support and rates of AYP achievement. None of these variables met tests of experimental importance. As a result, the researcher cannot reject the null hypothesis.

Conclusions

This section of Chapter Four discusses the conclusions for each of the six research questions driving this study. All conclusions were based on the data analysis provided above.

Question 1: What status of PBS do principals report?

Participants were asked to rate various aspects of four overall components of a Positive Behavior System as in-place, partially in-place, or not in-place as measured by Sugai, Horner, and Todd (2003). The four components were described as School-wide Systems, Non-classroom Settings, Classroom Settings, and Individual Students Systems.
Each component was defined for participants at the beginning of each section. Participants rated their schools in 18 areas regarding school-wide systems, nine areas regarding non-classroom settings, 11 areas regarding classroom-settings, and 8 areas regarding individual student systems. The data were then analyzed to determine what percentage of participants had high rates or low rates of components present for each PBS System.

The percentage of participants with high rates of components present was high in all cases. The percentage was highest for Non-classroom components; the percentage for Classroom setting and School-wide components were the next highest; Individual Student system components had the lowest percentage of participants with a high rate of components present; the percentage of participants rating high for all components present combined was also high. There was no way to compare the PBS data to a state or national average as such data is not available.

**Conclusion 1: Principals reported a high rate of Classroom Setting PBS present.**

Most principals reported a high rate of the Classroom Setting components of a Positive Behavior Systems present. In addition, principals reported a higher rate of Classroom Setting components present in their schools than Individual Student Positive Behavior System components.

The literature demonstrated that students should be directly taught social skills, both those useful in society and those necessary to school success; this instruction needs to occur for all students (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). Appropriate behaviors, those that meet school and societal norms and expectations need to be recognized and reinforced using both external and internal
reinforcement (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). The survey asked participants if expected student behavior and routines in classrooms, as well as problem behaviors, were clearly defined. Participants were also asked if the expected behaviors and routines were taught directly and acknowledged regularly. Therefore, it was possible to conclude that the strategies identified in the literature as necessary and appropriate social skills instructional strategies were in place in the schools citing high rates of Classroom Setting components in place.

**Conclusion 2: Principals reported a high rate of Non-classroom Settings and School-wide System PBS present.** Most principals reported a high rate of the components of Non-classroom Settings and School-wide Positive Behavior Systems present. In addition, principals reported a higher rate of Non-classroom Settings and School-wide components present in their schools than Individual Student System components.

Both of these systems fit into the first tier of Positive Behavior Systems as described by Luiselli, Putnam, Handler, & Feinberg (2005). The first tier, primary prevention, includes establishing school-wide behavior norms that (a) exist in all settings, classrooms, hallways, playgrounds, and so on, (b) are directly taught and (c) are reinforced and rewarded (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004). Schools may create tier one using copyrighted programs such as Second Step or Love and Logic, or craft their own models.

A review of the literature showed that appropriate behaviors, those that meet school and societal norms and expectations need to be recognized and reinforced using both external and internal reinforcement. The literature also showed that all stakeholders, including the administrator and teachers, need to be involved in planning and problem-
solving (Freeman et al., 2006; Lohrmann-O’Rourke et al., 2000; Sugai & Horner, 2004).
Participants were asked if a small number of positively and clearly stated student expectations were defined and directly taught for all students in all settings, including hallways, playgrounds, and so on; they were also asked if these expectations were rewarded and if a team existed for behavior support planning and problem solving. The survey also asked about the presence of active supervision and measures taken to improve physical safety related to facilities and schedules. In addition, participants were asked if options existed to allow classroom instruction to continue when problem behavior occurred and if procedures existed to address emergency/dangerous situations. Participants also noted whether all stakeholders were involved in behavior support, including the principal, the full schools staff, and family members, and if the behavior support planning had been based on current and regularly up-dated data. Therefore, due to the high rate of Non-classroom Setting and School-wide Positive Behavior System components reported present, it was possible to conclude that the strategies identified in the literature as necessary to tier one proactive and preventative planning for Positive Behavior Systems were present at a high rate in participants’ schools.

Conclusion 3: A moderate percentage of principals reported a high rate of Individual Student System PBS present. A moderate percentage of principals reported a high rate of the components of Individual Student Positive Behavior Systems present. In addition, principals reported a lower rate of Individual Student System components present than they did all other Positive Behavior System components.

The literature suggested that students behaving outside established norms are disciplined, yet if these behaviors are due to deficits in skills, PBS models seek to repair
the deficit through education, such as social skills small group instruction from a school psychologist or counselor and based on functional behavior assessments (Luiselli et al., 2005; Sugai & Horner, 2004). These levels of PBS fall into tier two, secondary prevention, which addresses student exhibiting signs of chronic, severe, or disruptive behavior and tier three, which addresses students regularly exhibiting chronic, severe, and/or disruptive behavior. Strategies at these levels may also include giving students credit towards graduation for using school time to meet with a licensed therapist (Luiselli et al., 2005; Sugai & Horner, 2004). In the Individual Student System portion of the survey, participants were asked about supports at the tier two and three levels for students engaging in chronic problem behaviors, including regular assessments, simple procedures for staff to request assistance, a quickly responding behavior support team, use of functional behavioral assessments, involvement of family and community members, and regular monitoring and feedback on students exhibiting chronic behavior problems. Therefore, due to the moderate percentage of principals with high rates of Individual Student System components present, it was possible to conclude that the strategies identified in the literature as necessary to tier two and three prevention and remediation for Positive Behavior Systems were present at a moderate rate in participants’ schools.

Conclusion 4: Principals reported a high rate of all PBS in-place. Most principals reported a high overall rate of all components of PBS present. Therefore, it was possible to conclude that the strategies identified in the literature as necessary to a successful Positive Behavior Support System were present at a high rate in participants’ schools.
Question 2: What level of student achievement level, as defined by AYP status in reading, math, attendance, and graduation rate, do principals report?

Participants were asked about their students’ achievement levels for the past school year (2007-2008), as defined by Adequately Yearly Progress (AYP) status. Participants identified their schools as made AYP, did not make AYP, or were too small to receive status. Participants also predicted if they thought their schools would make AYP next year, 2008-2009. Schools are required to make/report AYP status in the areas of reading, math, participation, attendance, and graduation rate. Therefore, participants identified their AYP status the same four areas. Elementary and junior high principals responded to AYP status in the areas of reading, math, and attendance, while high school principals responded to AYP status in the areas of reading, math, and graduation rate. AYP is set by the state, and all schools receive notification of their status from the state Office of Public Instruction; a link to a state listing of these data were also provided to participants to ensure accuracy in reporting.

Conclusion 5: Principals reported average levels of student achievement as defined by AYP status in reading and math. More participants reported making AYP in reading and math than reported they did not make AYP or were too small to receive status. The average level of student achievement as defined by AYP status in reading and math was slightly below the state average in both areas.

Conclusion 6: Principals predicted a large increase in levels of student achievement as defined by AYP status in reading and a small increase in levels of student achievement as defined by AYP status in math. A large percentage of participants who did not make AYP in reading last year predicted they will make that status next year. A small
percentage of participants who did not make AYP in math last year predicted they will make that status next year.

**Conclusion 7:** Principals reported average levels of student achievement as defined by AYP status in attendance and graduation. More participants reported making AYP in attendance and graduation than reported that they did not make it or were too small to receive status. The average level of student achievement as defined by AYP status attendance and graduation was slightly below the state average in both areas.

**Conclusion 8:** Principals predicted a small increase in levels of student achievement as defined by AYP status in attendance and no increase in levels of student achievement as defined by AYP status in graduation. A small percentage of participants who did not make AYP in attendance last year predicted they will make that status next year. No participants who did not make AYP in graduation last year predicted they will make AYP in graduation next year.

**Question 3:** What level of severe problem behavior, as defined by suspension/expulsion rate and compared to state average, do principals report?

State and federal mandates now demand accountability not only as a general school population, but also within specific disaggregated groups (United States Department of Education, 2005). As Nettles & Harrington (2007) point out, one of the most challenging disaggregated groups is that of students with disabilities. If schools cannot grow student achievement within even this most challenging group, this can be the difference between meeting Adequate Yearly Progress or not, as discussed in the review of the literature.
Conclusion 9: Principals reported very low levels of severe problem behavior, as defined by suspension/expulsion rate and compared to state average. Participants were asked to report their school enrollment size and their number of suspensions and expulsions; a rate of severe problem behavior was established for each respondent. In the case of suspensions, participants reported rates well below state averages; in the case of expulsions, participants reported rates slightly below state averages. In both cases, state averages of severe problem behavior were low, making it possible to conclude that participants’ schools had very low levels of severe problem behavior.

Question 4: What levels of perceived job stress do principals report?

The review of the literature showed that a concern for principals’ job stress levels exists. Principals are expected to be far more than managers, including dealing with bomb threats, leading the school improvement process, planning effective professional development, supervising and instructing teachers, attending after-school events, dealing with discipline, and more (Monroe, 2007).

Participants’ stress levels were measured through the Administrative Stress Index (ASI) created by Swent and Gmelch in 1977. The ASI is a Likert-scaled survey instrument with 35 items and six possible answers for each item. The responses for each item range from Not Applicable to Frequently Bothers Me. The items on the ASI can be clustered in five groups of stressors, categorized as “administrative constraints,” “administrative responsibilities,” “interpersonal relations,” “intrapersonal conflicts,” and “role expectations” (see Appendix C: Administrative Stress Index Clusters of Stressors). Therefore, it is also possible to gather a score for each category and overall stress. Participants’ scores fell into the categories of low stress, moderate stress, and high stress.
in each cluster and overall administrative stress level.

**Conclusion 10: Principals reported low levels of perceived role expectation stress.** Participants rated themselves in the low stress range in the cluster of role expectation stress. Role expectations concentrated on differences between self-expectations and the expectations of all the groups the administrator must serve (students, parents, boards of education, members of the community, supervisors, and colleagues) and included such stressors as unclear job descriptions, lack of feedback, and dealing with conflicting demands. Principals reported role expectation stress levels lower than all other types of job stress.

**Conclusion 11: Principals reported low levels of perceived administrative responsibility stress.** Participants rated themselves in the low stress range in the cluster of administrative responsibility stress. Administrative responsibilities related to job tasks such as supervision, coordination, evaluation, negotiations, budget, preparation, report writing, and public relations. Principals reported administrative responsibility stress levels lower than all other types of job stress other than role expectation stress.

**Conclusion 12: Principals reported low levels of perceived interpersonal relation stress.** Participants rated themselves in the low stress range in the cluster of interpersonal relation stress. Interpersonal relations focused on communication with staff; handling conflicts; and resolving differences among parents, school staff, students, and superiors. Principals reported interpersonal relation stress levels slightly higher than role expectation and administrative responsibility stress, the same as intrapersonal conflict stress, and lower than administrative constraint stress.
Conclusion 13: Principals reported low levels of perceived intrapersonal conflict stress. Participants rated themselves in the low stress range in the cluster of intrapersonal conflict stress. Intrapersonal conflicts centered on the discrepancy between performance and one’s internal beliefs, attitudes, and expectations pertaining to self-confidence; self-imposed expectations; social expectations; and making decisions which affect the lives of others. Principals reported intrapersonal stress levels slightly higher than role expectation and administrative responsibility stress, the same as interpersonal relation stress, and lower than administrative constraint stress.

Conclusion 14: Principals reported moderately low levels of perceived administrative constraints stress. Participants rated themselves at the low end of the moderate stress range in the cluster of administrative constraints stress. Administrative constraints pertained to stress derived from meetings; frequent interruptions; time restraints; heavy workloads; and compliance with organizational policies, governmental rules, and regulations. Principals reported in administrative constraint stress levels higher than all types of administrative stress.

Conclusion 15: Principals reported moderately low levels of perceived overall administrative job stress. Participants rated themselves at the low end of the moderate stress range in the overall rates of administrative stress. The ranking, from highest to lowest, of perceived stress within the clusters was administrative constraints, interpersonal relations, intrapersonal conflicts, administrative responsibilities, and role expectations. Monroe’s 2007 study of Arizona principals using the same stress index found the ranking order to be nearly the same, with administrative constraints ranking the highest stress and role expectations ranking the lowest stress. In addition, principals
reported moderately low levels of perceived overall administrative job stress.

**Question 5:** What is the relationship between the status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress?

A review of the literature showed that the job of a principal is one of high stakes and high stress, particularly in the area of accountability for student achievement. The literature also demonstrated that maintaining safe and welcoming schools is one of the most challenging, and therefore stressful, demands put upon today’s principals. Furthermore, the literature showed that job stress can lead to high costs for individuals and their organizations, including health care and turnover. The goal of this study was to investigate the relationship between these issues, specifically whether implementing PBS was associated with student achievement, severe problem behavior, and administrative stress.

**Conclusion 16:** There was no relationship between PBS and student achievement. Data analysis examined the relationship between all four components and overall rates of the Positive Behavior Support System and each of the eight areas of student achievement, as measured by current and future Adequate Yearly Progress in reading, math, attendance, and graduation. No relationship of experimental importance was found between any components of the Positive Behavior Support System and any type of student achievement. Therefore, it was possible to conclude that this study found no relationship between the status of PBS in a school and that school’s level of student achievement as measured by AYP.

**Conclusion 17:** There was no relationship between PBS and severe problem behavior, as measured by suspension/expulsion rates. Data analysis examined the
relationship between all four components and overall rates of the Positive Behavior Support System and suspension/expulsion rates as compared to state average. No relationship of experimental importance was found between any components of the Positive Behavior Support System and any measure of severe problem behavior. Therefore, it was possible to conclude that this study found no relationship between the status of PBS in a school and that school’s level of severe problem behavior as measured by suspension/expulsion rates.

Conclusion 18: There was no relationship of experimental importance between PBS and Administrative Stress Levels; though principals who reported higher rates of PBS reported lower levels of Administrative Stress. No variables met tests of experimental importance when combining rates of Positive Behavior Support and levels of Administrative Stress. However, all of these were negative correlations, meaning that as rates of PBS went up, levels of administrative stress went down. Due to the pattern of negative correlations, further statistical analysis was performed on these variables; still no findings of experimental importance were found. Therefore, it was possible to conclude there is no relationship between higher rates of Positive Behavior Support Systems in-place and lower levels of administrative stress.

Conclusion 19: There was no relationship between student achievement, as measured by AYP status, and severe problem behavior, as measured by suspension/expulsion rates. Data analysis examined the relationship between each of the eight areas of student achievement, as defined by current and future Adequate Yearly Progress in reading, math, attendance, and graduation, and suspension/expulsion rates and suspension/expulsion rates as compared to state average. No relationship that met
both statistical and experimental significance was found between any measure of student achievement and any measure of severe problem behavior. Therefore, it was possible to conclude that this study found no relationship between student achievement level, as defined by current and predicted AYP status in a school, and that school’s level of severe problem behavior as defined by suspension/expulsion rates.

Conclusion 20: There was no relationship between student achievement, as defined by AYP status, and Administrative Stress Level, as measured by the Administrative Stress Index. Data analysis examined the relationship between each of the eight areas of student achievement, defined as current and future Adequate Yearly Progress in reading, math, attendance, and graduation, and levels of administrative stress clusters and overall administrative stress as measured by the Administrative Stress Index. No relationship that met both statistical and experimental significance was found between any measure of student achievement and any cluster or overall administrative stress. Therefore, it was possible to conclude that this study found no relationship between student achievement level, defined as current and predicted AYP status in a school, and principals’ perceived levels of administrative stress.

Conclusion 21: There was no relationship between severe problem behavior, as defined by suspension/expulsion rates and compared to state average, and Administrative Stress Levels, as measured by the Administrative Stress Index. Data analysis examined the relationship between suspension/expulsion rates and suspension/expulsion rates as compared to state average, and levels of administrative stress clusters and overall administrative stress as measured by the Administrative Stress Index. No relationship that met both statistical and experimental significance was found between any measure of
severe problem behavior and any cluster or overall administrative stress. Therefore, it was possible to conclude that this study found no relationship between severe problem behavior, as defined by suspension/expulsion rates and compared to state average, and principals’ perceived levels of administrative stress.

**Question 6:** What is the relationship between these variables and participant variables of gender, district size, school grade level, school poverty level, previous training/education, and years of experience?

Participants were asked to describe themselves and their schools by answering questions about their gender, district size, school grade level, school poverty level, previous training in areas related to Positive Behavior Systems, place of initial licensure, and years of teaching and administrative experience. These questions allowed the study to examine characteristics of principals and their schools identified in the literature as possibly related to levels of administrative stress, as well as possibly relating to success of implementing Positive Behavior Reports. Each of the participant variables was matched with each of the four study variables, student achievement, severe problem behavior, status of PBS, and levels of administrative stress, as well as their various components as described earlier. These matched pairs were subjected to statistical analysis, including calculation of correlation with Spearman’s Rho. Some variables were subjected to further analysis.

School size is a determinate of the types of roles school principals are asked to fulfill. The smaller the school, the less support services are available, and the more roles the principal fulfills. Larger districts are able to pool resources such as school psychologists and behavior specialists that could provide support for principals
implementing PBS and therefore could have a relationship with levels of PBS, administrative stress levels, or other study variables.

Currently, there is more research available on implementation of PBS in elementary schools. The imbalance may be because it is easier, more attractive, more crucial, or something else entirely to implement PBS in elementary schools. Therefore, data were collected regarding the grade level of each respondent’s school. Furthermore, participants noted whether they received their principal licensure in the Montana University system or elsewhere. Participants also reported their years of teaching and administrative experience.

Participants also rated their school’s level of poverty, as defined by percentage of school population eligible for free or reduced lunch. This population is often the sub-group within a school or district that does not make AYP, as can be ascertained by searching Montana’s OPI AYP database. In addition, this population is often associated with higher rates of social/emotional issues (e.g., McLeod & Nonnemaker, 2000).

Participants reported levels of training, whether during licensure courses, after, or on the job, related to PBS, i.e. e., training related to the core components of PBS:

(a) setting school-wide behavior expectations

(b) teaching critical interpersonal skills

(c) providing systematic positive reinforcement for meeting/or exceeding behavior expectations

(d) monitoring behavior intervention efficacy continuously through data collection and analysis

(e) involving all stakeholders in the formulation of discipline practices
(f) reducing and eliminating reactive, punitive, and exclusionary strategies in favor of a proactive, preventive, and skill-building orientation (Luiselli, Putnam, Handler, & Feinberg, 2005).

Conclusion 22: There was no relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables of school grade level, school poverty level, previous education as pertains to original licensure, or years of experience. Data analysis examined the relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables of school grade level, school poverty level, previous education as pertains to original licensure, and years of experience. No relationship of experimental importance was found between any combinations of these variables. Therefore, it was possible to conclude that this study found no relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables of school grade level, school poverty level, previous education as pertains to initial licensure, or years of experience.

Conclusion 23: There was no relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables of gender and district size. Data analysis examined the relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables participant variables of gender and district size. No relationship of experimental importance was found in any combination of these variables. Therefore, it was possible to conclude there
is no relationship between variables of status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress and participant variables of gender and district size.

**Conclusion 24: There was a relationship between previous training in areas related to PBS and the presence of Positive Behavior Support Systems in-place.** Though none of the variables of training in areas related to PBS and the presence of PBS met the first tests of experimental importance, these data five combinations of variables were then subjected to further analysis. The percent of participants with 100% in-place in each PBS system who also had the highest level of training in areas related to PBS was significantly higher than those with only some components in-place in all cases. Therefore, it was possible to conclude that there is a relationship between previous training in areas related to PBS and the presence of Positive Behavior Support Systems in-place.

**Summary of Chapter Four**

Chapter Four provided an analysis of the data collected for this study, as well as findings and conclusions based upon these data. Montana principals from all school sizes and grade levels responded to a survey, choosing between the online version and paper version; this survey was comprised of questions relating to Respondent Characteristic, School Achievement, School Discipline Data, Positive Behavior Systems, and Administrative Stress. Means, medians, and standard deviations were calculated for appropriate variables, as well as some frequencies and ranges, identifying the average respondent’s school as having a male administrator, making AYP in most areas, having suspension and expulsion rates lower than the state average, having high rates of Positive Behavior Systems Present, and having low to moderate rates of administrative stress.
Variables were subjected to correlation statistics, and those meeting the screening level of .5 and statistical significance of .05 were subjected to discriminant function analysis and classification. No experimentally important relationship was found between PBS rates, student achievement, severe problem behavior, or administrative stress. However, an experimentally important relationship was found between level of PBS-related training and rates of PBS components present; statistical analysis showed a consistent pattern of participants with the highest levels of PBS-related training reporting the highest rates of PBS components present. In addition, though the results did not meet tests of importance, there was a consistent pattern of low administrative stress levels associated with higher rates of PBS components present. Chapter Five provides a discussion of conclusions and recommendations based on the results of this study.
CHAPTER FIVE: DISCUSSION

Introduction

This chapter presents a summary of the study as well as a discussion of conclusions. The chapter also provides recommendations for future research and practice. Finally, the chapter concludes with the implications of this study.

Overview of the Study

A review of the literature showed that the job of a principal is one of high stakes and high stress, particularly in the area of accountability for student achievement. The literature also showed that maintaining safe and welcoming schools is one of the most challenging, and therefore stressful, demands put upon today’s principals. Furthermore, the literature showed that job stress can lead to high costs for individuals and their organizations, including health care and turnover. Furthermore, the literature pointed to the possibility of PBS to maintain a safe and welcoming school and also to increase time and energy for the instruction necessary to meet accountability demands.

This study investigated the relationships among PBS, student achievement, severe problem behavior, and administrative stress, as measured through the Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2003), Adequate Yearly Progress (AYP) (OPI, 2008), suspension/expulsion rates, the Administrative Stress Index (Gmelch & Swent, 1977), and participant variables. This study specifically addressed the following research questions:

1. What status of Positive Behavior Supports (PBS) will principals report?
2. What level of student achievement, as defined by AYP status in reading, math, attendance, & graduation rate, will principals report?
3. What level of severe problem behavior, as defined by suspension/expulsion rate and compared to state average, will principals report?

4. What levels of perceived stress will principals report?

5. What is the relationship between the status of PBS, levels of student achievement, levels of severe problem behavior, and administrative stress?

6. What is the relationship between these variables and participant variables of district size, school grade level, school poverty level, previous training/education, and years of experience?

The descriptive study utilized a survey to gather information from principals in the areas of interest. The survey was developed based on review of previous research. The administrative stress portion of the survey was taken, with permission, from Dr. Gmelch’s Administrative Stress Index (see Appendix A for survey and Appendix B for permission). The PBS portion of the survey did not require permission, and was taken from the Effective Behavior Supports Survey by Sugai et al. (2003) at the University of Oregon (see Appendix A). The survey asked for rates of suspension/expulsion and AYP status as reported by participants. The survey also asked for responses to participant variables of gender, district size, school grade level, school poverty level, previous training/education, and years of experience. The survey was developed to elicit data necessary to investigate the six research questions listed above; the data gathered through the survey sought to answer the first three research questions and the data were analyzed to answer the last two research questions.

A total of 35 variables were coded. Medians, means, standard deviations, ranges, and correlations were calculated from the relevant survey data. The Likert-type data
gathered by two portions of the survey was considered ordinal level data, as it cannot be assumed that the difference between each answer (i.e., agree/strongly agree and disagree/strongly disagree) is an equal interval and therefore must be considered to be ranked data. Therefore, the correlation coefficient (Spearman’s Rho) was used to identify the strength and direction of the relationships among all variables (Cozby, 2007). Further statistical analyses were performed on variables to identify any other relationships.

The average respondent’s school had a male administrator, made AYP in most areas, had very low suspension and expulsion rates which were also lower than the state average, had high rates of Positive Behavior Systems Present, and had low to moderate rates of administrative stress. The Positive Behavior System components associated with Individual Student Systems had the lowest rate present. The stress cluster of Administrative Constraints had the highest levels of perceived stress reported, though results fell in the moderate stress level range.

Variables were subjected to correlation statistics, and those meeting the screening level of .5 and statistical significance of .05 were subjected to discriminant function analysis and classification. No variables passed the screening tests. However, there was a consistent pattern of weak negative correlation between higher rates of PBS components present and lower levels of administrative stress.

All variables including PBS component data were subjected to further analysis, yet there no findings of experimental importance, with one exception. The percent of participants with 100% of components in-place in each PBS system who also had the highest level of PBS training was higher than those with only some components in-place in all cases. Therefore, it was concluded that there was a relationship between high rates
Discussion

Of the findings and conclusions discussed above, two stand out as needing further discussion: the consistent pattern of weak negative correlation between higher rates of PBS components present and lower levels of administrative stress and the lack of findings of importance regarding the relationships among study variables. This section addresses both of these topics.

The pattern of negative correlation between higher rates of PBS components present and lower levels of administrative stress is not surprising; this pattern is precisely what the review of the literature predicts one will find when looking at these variables. What the literature does not explain, however, is why the relationships are so weak.

The levels of administrative stress were measured by the ASI, as explained earlier. The limitations of the ASI discussed in Chapter Three included that the original instrument was designed some thirty years ago. Though it has remained a popular survey to the present day to measure administrative stress, the instrument may not be properly sensitive to current administrative stress levels. This lack of sensitivity may have resulted in principals reporting low levels of stress regarding the questions sought by the survey, but not reporting higher levels of stress in areas not addressed by the survey. For instance, though the survey addressed the demands of all types of communication, it did not specifically ask about today’s demands of instant responses to such communications, such as e-mail, websites, cell phones, voice mail, and texting. Though the survey asked about meetings that take up too much time, it did not specifically address special education meetings, which have greatly increased in number since the original design of
this survey due to changes in societal expectations and federal and state law pertaining to students with disabilities. However, the two examples here, communication demands and too many meetings, were each part of more general questions falling in the administrative constraints stress cluster, the cluster with the highest mean rank as reported by Montana principals. Montana principals reported moderate levels of administrative constraints stress, while all other clusters had average mean ranks in the low stress range. If these questions were more specific, as described above, the level of stress reported regarding this cluster may have been even higher, resulting in one stress cluster in the high stress range. Furthermore, since the ASI was first created, the curriculum and instruction demands of schools have become far more explicit, including computer education, multicultural education, bilingual education, full day kindergarten, after school programs, alternative high schools, anti-smoking and drug prevention, and HIV/AIDS prevention (Vollmer, 2000). Again, the general nature of the types of questions asked on the ASI may not be sensitive enough to pick up the stress created by specific demands in areas such as curriculum and instruction.

On the other hand, schools of education and organizations and school districts delivering professional development may have successfully shifted their programs to address the stressors measured over the decades by the ASI, including properly warning them of exactly the types of stress they might encounter on the job as well as providing the necessary education to increasing the likelihood of successfully coping with such stressors. It is also important to note the high percentage of participants who were graduates of the Montana University system; more than twice as many participants reported receiving their initial licensure in-state. If the state schools of education are
aware of what state administrators need to know and educate their graduates accordingly, such alignment would likely lower levels of stress for administrators practicing in-state.

In addition, as the review of the literature discussed, as the pressures of accountability have increased, leadership has, out of necessity, become more of a team effort and consequently more transparent to those not in administrative positions. Therefore, prior to becoming principals, teachers now have more opportunities to work closely with their administrator, and perhaps therefore have a clearer idea of the job’s demands. This could result in those educators not of the temperament to handle the stressors of school administration being more aware of the lack of fit prior to attempting to become an administrator, and therefore more educators suited to the stressors particular to administration opting to pursue that avenue.

The above issues could result in a growing percentage of administrators who know what to expect about the demands of the job and are therefore self-selecting administration correctly, as well as principals properly educated for school administration. This would result in administrators properly prepared to deal with such stressors, and therefore reporting low levels of administrative stress as measured by the ASI. In addition, the wording of the questions asked on the ASI implies it is designed to investigate stress over time; participants were asked not to rank how highly an item stressed them but how frequently it bothered them. This aligned with the review of the literature that showed that prolonged stress is far more detrimental than highly stressful events that are resolved quickly. The types of stressors evaluated on the ASI may no longer be prolonged types of stress, due to changes in environment and education. If the stress experienced is of high intensity but short duration because the administrator knows
how to cope with the cause of the stressor, the ASI would measure the stress at a low level. All of the above factors could drive administrative stress levels, as measured by the ASI, so low it would be difficult for the data analysis described above to find a strong correlation.

Similar to the above issues with the instrument used to measure stress, the results of the study may have been affected by the measurements of the other variables. For instance, the other main study variables were narrowly defined, with student achievement defined as making AYP and severe problem behavior defined as rates of suspensions and expulsions. Student achievement was defined as AYP because the review of the literature showed the pressures administrators face in achieving AYP due AYP status being widely reported in the media and tied to federal monies necessary to sustain many schools. However, AYP status is not a sensitive measurement; except for the small number of schools too small to receive status, all schools fall into only two categories, either made or did not make AYP. Defining student achievement as grade point average or actual score on a standardized test would have allowed for finer distinctions in student achievement and therefore a greater range of levels of student achievement. Such data may have resulted in findings of importance when investigating relationships between student achievement and other study variables. It is important to note, however, that few studies rely upon grade point average data, as grading is notoriously inconsistent and therefore difficult to compare from one teacher to another or one school to another.

Severe problem behavior was narrowly defined, as well, due to the difficulties in comparing other ways of defining severe problem behavior between schools and grade levels. For instance, severe problem behavior could be defined as office visits or number
of disruptions in the classroom. Such data would be difficult to compare from one school
to another, due to different expectations for each teacher, principal, and grade level as to
what constitutes a reason for an office referral. In addition, it may be difficult to gather
via survey; it is hard to imagine large numbers of teachers finding time to accurately
record how many times their students disrupted class, not to mention the differences in
tolerance towards disruptions that could affect counts. However, given the high rates of
PBS principals reported, fewer suspensions and expulsions should be happening due to
PBS strategies avoiding punitive and exclusionary strategies. Therefore, the very success
of PBS in Montana could drive rates of suspensions and expulsions down so low as to
throw off findings of importance concerning the severe problem behavior variable. In the
same way, the very success of Montana schools in achieving AYP and promoting and
supporting PBS, as well as the high numbers of graduates of Montana schools of
education apparently successfully prepared to handle administrative stress, could lead to
results not conducive to finding strong relationships among variables.

Recommendations

Recommendations for practice and future research were based upon the findings
and conclusions of Chapter Four as well as the discussion above. The implications of this
study for universities, school districts, Montana educators and others follows the
recommendations, and were also based upon the findings and conclusions of Chapter
Four as well as the discussion above.

Recommendations for Practice

Recommendation 1. School districts should evaluate their policies, requirements, and
practices to better support school principals in the area of administrative constraints.
Administrative constraints pertained to stress derived from meetings; frequent interruptions; time restraints; heavy workloads; and compliance with organizational policies, governmental rules, and regulations. The results of this study show that principals at all grade levels and sizes of districts experience more stress from administrative constraints than in all other areas. Districts should evaluate their rules and policies in the area of administrative constraints, and identify areas where their principals have excessive expectations, procedures are inefficient, or there is a lack of support from either supervisors or staff.

While districts cannot directly control state and federal mandates, school boards and superintendents can advocate on behalf of reasonable and effective requirements; they can also work to lighten the negative effects such mandates and policies may have on their principals. In addition, as the review of the literature showed that higher job stress correlates to higher job turnover, school districts and universities can promote practices that correlate to lower administrative stress, thereby retaining quality administrators in their schools and in this state.

Recommendation 2. School districts and universities should support education and professional development to alleviate administrative constraint stress for current and future principals.

Administrative constraints, as described above, rated as the most stressful component of principals’ jobs. Universities preparing principals for jobs in school administration should examine their coursework to ensure that principals are prepared to run efficient meetings, have strategies to mitigate frequent interruptions, are prepared to manage their time effectively, understand state and federal mandates, and have strategies
to balance heavy workloads with the rest of their lives. School districts should support this type of professional development for current principals, as this study shows that current working principals are experiencing stress in these areas. All of the factors contributing to administrative constraint stress can be addressed by participation in professional development that already exists; for example, professional development for principals has been offered in the State of Montana within the past few years in the areas of time management, school law, and conflict resolution. Such professional development has been offered through organizations such as the School Administrators of Montana and the state principals’ associations. School districts should support their principals in managing job stress by covering the costs of attending such professional development. In addition, as the review of the literature showed that higher job stress correlates to higher job turnover, school districts and universities can promote practices that correlate to lower administrative stress, thereby retaining quality administrators in their schools and in this state.

Recommendation 3. School districts and universities interested in increasing the presence of PBS in schools should provide training in areas related to PBS for current and future principals.

This study indicates a strong relationship between training in PBS and the presence of these systems in a principal’s school. Given these data, school districts and universities interested in increasing the presence of PBS systems in schools should provide training in areas related to PBS for current and future principals. Specifically, school districts and universities can provide training in setting consensus-driven behavior expectations; teaching critical interpersonal skills; providing systematic positive
reinforcement for meeting and exceeding performance criteria; monitoring intervention
efficacy continuously through data collection and analysis; involving all stakeholders in
the formulation of discipline practices, and reducing and eliminating reactive, punitive,
and exclusionary strategies in favor of a proactive, preventive, and skill-building
orientation. By providing training for current and future principals in these areas, school
districts and universities interested in increasing the presence of Positive Behavior
Support Systems in schools can meet that goal.

Recommendations for Future Research

Recommendation 1. This study should be replicated in different states with the same
variety of school administrators to determine if the findings can be generalized to a
larger population.

The results of future studies can be compared to the findings from this study to
determine if the patterns found exist elsewhere, or are unique to Montana. This study
already replicates some studies, in the respect that the Administrative Stress Index has
been given in many settings and many states. For instance, Monroe (2007) found that
Arizona high school principals experienced a similar pattern of stress to Montana
principals, with administrative constraint stress rating the highest and role expectation
stress rating the lowest. The amount of quantitative research on the relationships between
PBS and student achievement and other variables is lacking; future studies in these areas
could explore the relationships and lack thereof found in this study. For instance, if other
studies find no relationship between increased PBS and increased student achievement or
decreased severe problem behavior, this will help determine if this trend in school
behavior strategies actually meets schools’ needs.
Recommendation 2. Future studies of administrative stress should investigate more closely the variables unique to Montana school systems or the Administrative Stress Index contributing to low administrative stress levels.

A review of the literature showed that there are concerns about rising stress levels amongst school administrators and that high stress levels correlate to high job turnover. Yet this study found that a sample of Montana principals accurately representing the population of all Montana principals in schools of all sizes, grade levels, and poverty levels, reported low levels of perceived administrative stress. Are there factors unique to Montana schools that contribute to the low administrative stress levels reported by participants? Or would stress levels of Montana school administrators match more closely the trends reported in the literature with a different survey instrument? Universities, school districts, and school administrators would benefit from a deeper understanding of these administrators if they, their stress levels, and their school systems indeed represent something unique. If future studies in other states using the same survey instrument showed the same pattern of low administrative stress, researchers could begin to determine if this instrument is still valid, or if the stressors investigated by the ASI are now addressed through proper education and professional development. Future studies could address these additional areas of inquiry.

Recommendation 3. Future quantitative studies of PBS and student achievement, problem behavior, and administrative stress should assess the amount of time PBS have been in-place, as well as prior levels of student achievement and severe problem behavior.

A review of the literature showed that the studies in this area were primarily longitudinal studies of two or more years. The length of time PBS was in place in
participants’ schools was not a variable sought in this study, nor was prior levels of student achievement or severe problem behavior. The lack of relationship found in this study between PBS and student achievement and problem behavior may be simply because the PBS have not been in place long enough to see these types of results. In addition, as these additional variables were not sought, there is no way to determine if student achievement has increased or severe problem behavior has decreased since PBS has been in-place. Future studies could address these additional areas of inquiry.

Recommendation 4. Future studies of PBS, student achievement, severe problem behavior and principal stress should be designed to moderate the possible effects of a non-response bias.

Of the principals contacted through this study, fifty percent responded to the researcher’s request for participation in this study. As this study examined stress levels, it is worth considering those principals who did not respond. Participants reported low levels of administrative stress; was this because those principals with high stress were so overwhelmed by their job that they could not respond to the survey? Participants also reported average levels of student achievement and below average levels of severe problem behavior; is this because those who had time to respond to the survey are working in less stressful schools with higher levels of student achievement and lower levels of severe problem behavior as compared to those who did not respond? Participants reported high rates of PBS in-place; is this because those who did not respond were busy with the demands of putting such systems in place? Future studies could help answers these questions and provide more data regarding the relationships between the study variables.
**Recommendation 5.** Future studies in the State of Montana should replicate this study’s collection of data related to status of Positive Behavior Support Systems, student achievement, severe problem behavior, and administrative stress in order to attain longitudinal data.

By replicating this study’s data collection of the status of Positive Behavior Support Systems, student achievement, severe problem behavior, and administrative stress, future researchers could compare this study’s data to future data. The participants to this study reported high rates of PBS in-place; will this rate be sustained? Participants also reported average student achievement; in schools with and without PBS will these levels be sustained, increase, or decrease? Participants reported low levels of severe problem behavior; will this rate change over the next few years? Participants reported low levels of administrative stress; will this trend be sustained over time? Answers to these questions from future studies could help inform practice and research, as well as paint an accurate picture of Montana schools and their principals. If Montana principals continue to experience low stress levels, this may be a statistic to use to encourage strong teacher leaders to become principals and for school districts to recruit strong leaders from other states. The same possibilities exist if severe problem behavior stays at low levels, and student achievement stays at or above present levels.

**Recommendation 6.** Future studies should replicate this study’s collection of data related to status of Positive Behavior Support Systems, but try other methods for defining and measuring student achievement, severe problem behavior, and administrative stress.

As discussed above, the narrow definitions of student achievement, severe problem behavior, as well as the possible limitations of the instrument used to measure...
administrative stress may have contributed to the lack of findings of importance. Therefore, future researchers should investigate other ways to define and/or measure student achievement, severe problem behavior and administrative stress, in case other definitions would show a different relationship with PBS. The review of the literature showed that understanding the relationships among these variables is crucial to current and future educators; therefore, continuing to explore the methods that can accurately ascertain current levels of or changes in student achievement, severe problem behavior, and administrative stress is critical. Future studies could help answer these questions and provide more data regarding the relationships between the study variables.

Implications

The role of public school principal is nearly overwhelming in its complexity; principals must understand everything from phonemic segmentation to personnel supervision in order to facilitate an optimal learning environment in his or her school. Many studies have investigated the complex job of a principal, but more importantly, all of these studies exist because of the undeniable importance of the job of principal itself (Nettles & Herrington, 2007). Research demonstrates that successful schools are run by successful principals (Newmann, King, & Youngs, 2000). Schools without such leaders may have great teachers or great programs, but they will never have a great school community, equipped to deal with the challenges of providing public school education in the 21st Century (Fullan, 2002). If universities wish to create successful leaders, school districts wish to retain successful principals, and principals wish to lead safe and successful schools, continuing to examine the relationship between PBS, student achievement, severe problem behavior, and administrative stress is crucial.
This study added to the body of research concerning job stress, principal job stress, and best-practices for educating challenging students and maintaining safe and orderly schools. This study also added to the body of research on organizational effectiveness and best-practices for student achievement, as well as research relating to Positive Behavior Systems. This study provided evidence that stress related to administrative constraints was the highest stress cluster reported by Montana principals at all grade levels. Therefore, strategies that alleviate this type of stress, such as policy review and time-management training, can be pursued by school districts, state organizations, and universities who wish to improve the job experience of current and future Montana principals.

This study also provided evidence that training in Positive Behavior Support Systems could lead to an increased presence of such systems in schools. School districts seeking to increase the presence of PBS in their schools, as well as districts, state organizations, and universities seeking to promote strategies related to PBS, should provide Positive Behavior Support Systems training and financial support of attendance at such training.

This study also provided educators and educational leaders in Montana a baseline for collecting data related to the crucial educational issues addressed in this study: student achievement, severe problem behavior, and administrative stress. The growing number of challenging students in American public schools, the disturbing levels of school violence, and the increased scrutiny of school achievement by the public, makes continuing to investigate these relationships beyond the end of this study a high priority. While the researcher hoped that aspects of this study will be replicated elsewhere, this study
provided conclusions and recommendations that were especially helpful to the Montana school community. At the time of this study, Montana had already shown its support of Positive Behavior Systems through its Montana Behavior Initiative, offered through the Office of Public Instruction. In this time of tightening budgets, the relationship between PBS training and the presence of PBS systems provided a reason for Montana schools interested in exploring the possible benefits of Positive Behavior Systems to continue to invest in Positive Behavior System training. For individuals and organizations involved in hiring and retention of school administrators in the State of Montana, this study provided data supporting that Montana has an attractive and appealing public school system; data showed high rates of Positive Behavior System components in-place and low levels of administrative stress as reported by Montana principals, as well as supporting the Office of Public Instruction’s data of reassuring levels of student achievement and low rates of severe problem behavior.
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Appendix A:
Survey Invitation and Instrument
Response Frequency Included

Dear colleague,

I am writing to request your participation in a study approved by the University of Montana’s School of Education. The study is aimed at identifying the job-related stress, status of Positive Behavior Supports, AYP status, and rates of student suspension/expulsion as reported by principals in Montana. As your job grows more complex and challenging, gathering this type of data is important to inform school districts, universities, and further research. Your participation in this study can help identify the need for changes necessary to support the important job you do in our public schools.

The link to the online survey is displayed below. A paper version of the survey is attached to this letter if you wish to use that format instead. If you return the paper version, please use the enclosed privacy envelope to ensure anonymity. By completing the survey online or filling out the paper version and returning it to the researcher, you are agreeing to participate. Simply discard this survey and do not respond online if you do not wish to participate. During pilot testing of the survey, participants completed the survey in 15-30 minutes. Please complete this anonymous and protected survey by September 1, 2008.

Link to survey:
https://www.surveymonkey.com/s.aspx?sm=HsxQ8qfl7Q04mJMh89R3tA_3d_3d

Thank your for your cooperation and participation. I look forward to sharing the information from this study upon completion of this research project. Please feel free to contact me with any questions about the study or survey at 406-827-0770 or jputhals@yahoo.com.

Sincerely,
Jennifer E. Guthals
Doctoral Candidate, Educational Leadership
University of Montana
Print version of survey:

Part One: Respondent Characteristics

Number of Responses Indicated in Blue

Please describe yourself and your school and district by answering the following questions to the best of your ability. Please estimate specific numbers requested as accurately as possible.

Part One: Respondent Characteristics

1. Gender
   - 134 a. Male
   - 83 b. Female

2. Size of district (choose one)
   - For Elementary Districts (districts not including any grade levels about grade 8):
     - 15 a. 1E, more than 2500 students
     - 12 b. 2E, 851 to 2500 students
     - 19 c. 3E, 401 to 850 students
     - 40 d. 4E, 151 to 400 students
     - 17 e. 5E, 41 to 400
     - 7 f. 6E, 40 or fewer students
   - For High School Districts (districts not including any grade levels below grade 9):
     - 11 g. 1H, more than 1250 students
     - 9 h. 2H, 401 to 1250 students
     - 9 i. 3H, 201 to 400 students
     - 8 j. 4H, 76 to 200 students
     - 0 k. 5H, 75 or fewer students
   - For K-12 Districts (districts including grade levels kindergarten through 12):
     - 28 l. 1K, more than 399 students
     - 40 m. 2K, 399 or fewer students

3. Grade level of school you supervise
   - 107 a. elementary (any combination of grades K-8, except schools with grades only above grade 5
   - 22 b. junior high (any combination grades five through nine)
   - 37 c. high school (any combination of grades nine through twelve)
   - 60 Other combinations, due to participants circling more than one choice.

4. Poverty level of school (please write in percentage)
   - [ ] percent of school qualifies for free or reduced lunches
   - 42% average response

5. I received my principal licensure...
   - 176 a. from the Montana University System
   - 53 b. elsewhere (out of state, online university, etc.)
6. I have had training during my licensure courses, after my licensure, or on the job in...
   (Circle all that apply)
   183  a. setting school-wide behavior expectations
   99   b. teaching critical interpersonal skills
   141  c. providing systematic positive reinforcement for meeting and/or exceeding behavior expectations
   140  d. monitoring behavior intervention efficacy continuously through data collection and analysis
   151  e. involving all stakeholders in the formulation of discipline practices
   145  f. reducing and eliminating reactive, punitive, and exclusionary strategies
       in favor of a proactive, preventive, and skill-building orientation

7. Years of teaching experience:

   14 years average response

8. Years of administrative experience:

   10 years average response

Part Two: Student Achievement Data

You may go to http://www.opimt.gov/ReportCard/index.html to access AYP status

9. 2007-2008 AYP Status in Reading for my school
   157  a. Made
   56   b. Did not make
   7    c. n too small to receive status

10. 2007-2008 AYP Status in Math for my school
    135  a. Made
    89   b. Did not make
    7    c. n too small to receive status

11. 2007-2008 AYP Status in Attendance
   (for elementary and junior high schools)
   202  a. Made
   9    b. Did not make
   9    c. n too small to receive status

12. 2007-2008 AYP Status in Graduation
    (for high schools)
   102  a. Made
   7    b. Did not make
   18   c. n too small to receive status

13. I predict that my school will have the following AYP status next time in Reading
    188  a. Make
    33   b. Will not make
    7    c. n too small to receive status

14. I predict that my school will have the following AYP status next time in Math
    140  a. Make
    79   b. Will not make
    7    c. n too small to receive status
15. I predict that my school will have the following AYP status next time in Attendance
   (for elementary and junior high schools)
   a. Make 207
   b. Will not make 4
   c. n too small to receive status 9

16. I predict that my school will have the following AYP status next time in Graduation
   (for high schools)
   a. Make 102
   b. Will not make 7
   c. n too small to receive status 16

Part III: Severe Problem Behavior

17. Number of students I supervise in my school
   
   315 average response

18. Number of students suspended in the school I supervise school year 2007-2008
   
   2% average response

19. Number of students expelled in the school I supervise school year 2007-2008
   
   0.1% average response
## Part IV: Effective Behavior Supports Survey (Sugai, Horner, & Todd, 2003)

*Mark one box for each question.*

### School-Wide Systems

<table>
<thead>
<tr>
<th>Current Status</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>In place</td>
<td>Partial In Place</td>
</tr>
<tr>
<td>182</td>
<td>32</td>
</tr>
<tr>
<td>174</td>
<td>42</td>
</tr>
<tr>
<td>127</td>
<td>65</td>
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<tr>
<td>179</td>
<td>42</td>
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<tr>
<td>174</td>
<td>45</td>
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<tr>
<td>131</td>
<td>79</td>
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<tr>
<td>173</td>
<td>44</td>
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<tr>
<td>199</td>
<td>22</td>
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<tr>
<td>137</td>
<td>61</td>
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<tr>
<td>193</td>
<td>20</td>
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<tr>
<td>113</td>
<td>76</td>
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<tr>
<td>99</td>
<td>72</td>
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<tr>
<td>167</td>
<td>50</td>
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<tr>
<td>59</td>
<td>84</td>
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<tr>
<td>50</td>
<td>71</td>
</tr>
<tr>
<td>143</td>
<td>64</td>
</tr>
<tr>
<td>101</td>
<td>86</td>
</tr>
</tbody>
</table>

School-wide is defined as involving all students, all staff, & all settings.

1. A small number (e.g. 3-5) of positively & clearly stated student expectations or rules are defined.

2. Expected student behaviors are taught directly.

3. Expected student behaviors are rewarded regularly.

4. Problem behaviors (failure to meet expected student behaviors) are defined clearly.

5. Consequences for problem behaviors are defined clearly.

6. Distinctions between office v. classroom managed problem behaviors are clear.

7. Options exist to allow classroom instruction to continue when problem behavior occurs.

8. Procedures are in place to address emergency/dangerous situations.

9. A team exists for behavior support planning & problem solving.

10. School administrator is an active participant on the behavior support team.

11. Data on problem behavior patterns are collected and summarized within an on-going system.

12. Patterns of student problem behavior are reported to teams and faculty for active decision-making on a regular basis (e.g. monthly).

13. School has formal strategies for informing families about expected student behaviors at school.

14. Booster training activities for students are developed, modified, & conducted based on school data.

15. School-wide behavior support team has a budget for (a) teaching students, (b) on-going rewards, and (c) annual staff planning.

16. All staff are involved directly and/or indirectly in school-wide interventions.

17. The school team has access to on-going training and support from district personnel.
18. The school is required by the district to report on the social climate, discipline level or student behavior at least annually.

### Non-Classroom Setting Systems

<table>
<thead>
<tr>
<th>Current Status</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>In place</td>
<td>Partial</td>
</tr>
</tbody>
</table>

**Non-classroom settings** are defined as particular times or places where supervision is emphasized (e.g., hallways, cafeteria, playground, bus).

1. School-wide expected student behaviors apply to non-classroom settings.

2. School-wide expected student behaviors are taught in non-classroom settings.

3. Supervisors actively supervise (move, scan, & interact) students in non-classroom settings.

4. Rewards exist for meeting expected student behaviors in non-classroom settings.

5. Physical/architectural features are modified to limit (a) unsupervised settings, (b) unclear traffic patterns, and (c) inappropriate access to & exit from school grounds.

6. Scheduling of student movement ensures appropriate numbers of students in on-classroom spaces.

7. Staff receives regular opportunities for developing and improving active supervision skills.

8. Status of student behavior and management practices are evaluated quarterly from data.

9. All staff are involved directly or indirectly in management of non-classroom settings.

### Classroom Setting Systems

<table>
<thead>
<tr>
<th>Current Status</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>In place</td>
<td>Partial</td>
</tr>
</tbody>
</table>

**Classroom settings** are defined as instructional settings in which teacher(s) supervise & teach groups of students.

1. Expected student behavior & routines in classrooms are stated positively & defined clearly.

2. Problem behaviors are defined clearly.

3. Expected student behavior & routines in classrooms are taught directly.

4. Expected student behaviors are acknowledged regularly (positively reinforced) (>4 positives to 1 negative).

5. Problem behaviors receive consistent consequences.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th>6. Procedures for expected &amp; problem behaviors are consistent with school-wide procedures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>166</td>
<td>51</td>
<td>6</td>
<td>7. Classroom-based options exist to allow classroom instruction to continue when problem behavior occurs.</td>
</tr>
<tr>
<td>156</td>
<td>59</td>
<td>7</td>
<td>8. Instruction &amp; curriculum materials are matched to student ability (math, reading, language).</td>
</tr>
<tr>
<td>141</td>
<td>74</td>
<td>6</td>
<td>9. Students experience high rates of academic success (≥ 75% correct).</td>
</tr>
<tr>
<td>132</td>
<td>78</td>
<td>13</td>
<td>10. Teachers have regular opportunities for access to assistance recommendations (observation, instruction, &amp; coaching).</td>
</tr>
<tr>
<td>169</td>
<td>51</td>
<td>2</td>
<td>11. Transitions between instructional &amp; non-instructional activities are efficient &amp; orderly.</td>
</tr>
</tbody>
</table>

**Individual Student Systems**

<table>
<thead>
<tr>
<th>Current Status</th>
<th>Feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>In place</td>
<td>Individual Student Systems are defined as for individual students engaging in chronic problem behaviors.</td>
</tr>
<tr>
<td>Partial In Place</td>
<td>1. Assessments are conducted regularly to identify students with chronic problem behaviors.</td>
</tr>
<tr>
<td>Not In Place</td>
<td>2. A simple process exists for teachers to request assistance.</td>
</tr>
<tr>
<td>In Place</td>
<td>3. A behavior support team responds promptly (within 2 working days) to students who present chronic problem behaviors.</td>
</tr>
<tr>
<td>In Place</td>
<td>4. Behavioral support team includes an individual skilled at conducting functional behavioral assessment.</td>
</tr>
<tr>
<td>In Place</td>
<td>5. Local resources are used to conduct functional assessment-based behavior support planning.</td>
</tr>
<tr>
<td>In Place</td>
<td>6. Significant family &amp;/or community members are involved when appropriate &amp; possible.</td>
</tr>
<tr>
<td>In Place</td>
<td>7. School includes formal opportunities for families to receive training on behavioral support/positive parenting strategies.</td>
</tr>
<tr>
<td>In Place</td>
<td>8. Behavior is monitored &amp; feedback provided regularly to the behavior support team &amp; relevant staff.</td>
</tr>
</tbody>
</table>
Part V: **Administrative Stress Survey:** Administrative Stress Index (Gmelch & Swent, 1977)

School administrators have identified the following work-related situations as sources of concern. It is possible that some of these situations bother you more than others. How much are YOU bothered by each of the situations listed below? Please indicate the appropriate response on the following scale:

<table>
<thead>
<tr>
<th>Not Applicable</th>
<th>Rarely or Never</th>
<th>Occasionally</th>
<th>Frequently</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Being interrupted frequently by telephone calls
   - NA: 0
   - 1: 46
   - 2: 41
   - 3: 97
   - 4: 23
   - 5: 13

2. Supervising and coordinating the tasks of many people
   - NA: 3
   - 1: 73
   - 2: 61
   - 3: 60
   - 4: 20
   - 5: 4

3. Feeling staff members don’t understand my goals and expectations
   - NA: 9
   - 1: 60
   - 2: 70
   - 3: 60
   - 4: 13
   - 5: 9

4. Feeling that I am not fully qualified to handle my job
   - NA: 11
   - 1: 118
   - 2: 45
   - 3: 36
   - 4: 7
   - 5: 4

5. Knowing that I can’t get information need to carry out my job properly
   - NA: 8
   - 1: 86
   - 2: 54
   - 3: 42
   - 4: 23
   - 5: 8

6. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me
   - NA: 5
   - 1: 92
   - 2: 45
   - 3: 47
   - 4: 16
   - 5: 15

7. Trying to resolve differences between and among students
   - NA: 2
   - 1: 84
   - 2: 66
   - 3: 52
   - 4: 13
   - 5: 2

8. Feeling not enough is expected of me by my superiors
   - NA: 19
   - 1: 166
   - 2: 23
   - 3: 9
   - 4: 2
   - 5: 1

9. Having my work frequently interrupted by staff members to talk
   - NA: 5
   - 1: 78
   - 2: 67
   - 3: 50
   - 4: 14
   - 5: 7

10. Imposing excessively high expectations on myself
    - NA: 4
    - 1: 55
    - 2: 31
    - 3: 52
    - 4: 42
    - 5: 35

11. Feeling pressure for better job performance over and above what I think is reasonable
    - NA: 4
    - 1: 5
    - 2: 80
    - 3: 52
    - 4: 44
    - 5: 23

12. Writing memos, letters, and other communications
    - NA: 2
    - 1: 89
    - 2: 68
    - 3: 40
    - 4: 15
    - 5: 5

13. Trying to resolve differences with my superiors
    - NA: 19
    - 1: 111
    - 2: 49
    - 3: 28
    - 4: 6
    - 5: 8

14. Speaking in front of groups
    - NA: 4
    - 1: 131
    - 2: 38
    - 3: 32
    - 4: 10
    - 5: 6

15. Attempting to meet social expectations (housing, clubs, friends, etc.)
    - NA: 7
    - 1: 89
    - 2: 49
    - 3: 56
    - 4: 14
    - 5: 6

16. Not knowing what my supervisor thinks of me, or how he/she evaluates my performance
    - NA: 9
    - 1: 105
    - 2: 51
    - 3: 34
    - 4: 12
    - 5: 9

17. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
    - NA: 2
    - 1: 55
    - 2: 52
    - 3: 66
    - 4: 33
    - 5: 13
<p>| | | | | | |</p>
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<tr>
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<tbody>
<tr>
<td>18. Feeling that I have to participate in school activities outside of the normal working hours at the expense of my personal time</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>19. Feeling that I have too much responsibility delegated to me by my superior</td>
<td>NA</td>
<td>1</td>
<td>2</td>
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<tr>
<td>20. Trying to resolve parent/school conflicts</td>
<td>NA</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>21. Preparing and allocating budget resources</td>
<td>NA</td>
<td>1</td>
<td>2</td>
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<tr>
<td>22. Feeling that I have too little authority to carry out responsibilities assigned to me</td>
<td>NA</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>23. Handling student discipline problems</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
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<tr>
<td>24. Being involved in the meet and confer process</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</tr>
<tr>
<td>25. Evaluating staff members’ performance</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
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<tr>
<td>26. Feeling that I have too heavy a workload, one that I cannot finish during the normal day</td>
<td>NA</td>
<td>1</td>
<td>2</td>
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<td>4</td>
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<tr>
<td>27. Complying with state, federal, and organizational rules and policies</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>28. Feeling that the progress on my job is not what it should or could be</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>29. Administering the negotiated contract (grievances, duties, interruptions, etc.)</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>30. Being unclear on just what the scope and responsibilities of my job are</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>31. Feeling that meetings take up too much time</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
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<tr>
<td>32. Trying to complete reports and other paper work on time</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>33. Trying to resolve differences between/among staff members</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>34. Trying to influence my immediate supervisor’s actions and decisions that affect me</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
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<tr>
<td>35. Trying to gain public approval and/or financial support for school programs</td>
<td>NA</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Appendix B:

Survey Use Permission

From: "Jennifer Guthals" <jguthals@blackfoot.net>
To: jputhals@yahoo.com
Subject: FW: Administrative Stress Index
Date: Sun, 30 Mar 2008 19:15:18 -0600

Jennifer E. Guthals
Principal, Thompson Falls Elementary
Where Everything Revolves Around Learning!
406-827-3592

From: Walt Gmelch [mailto:whgmelch@usfca.edu]
Sent: Wednesday, March 12, 2008 6:09 PM
To: jguthals@blackfoot.net
Subject: Administrative Stress Index

Dear Jennifer:

Per your request, you are hereby authorized to use the ASI in your doctoral study of administrative stress. My only request is that you cite the copyright (Walter H. Gmelch, University of San Francisco) and provide me with a summary of the results.

The items from the instrument have been factor analyzed and listed in the article by Kock, Tung, Gmelch and Swent (1982) and also by Gmelch and Swent (1984), Gmelch & Torelli (1994); Gmelch & Gates (1998). My vita is attached for full references.

Best of luck with your research,

Walt Gmelch

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Appendix C:

Administrative Stress Index Clusters of Stressors and Scoring

Add up totals for each cluster below and for all sections together, and score as follows:

Cluster score between 0 and 14 = low stress
Cluster score between 15 and 27 = moderate stress
Cluster score between 28 and 35 = high stress

Overall score between 0 and 70 = low stress
Overall score between 71 and 139 = moderate stress
Overall score between 140 and 175 = high stress

I. Administrative Constraints
   1. Being interrupted frequently by telephone calls
   2. Having my work frequently interrupted by staff members to talk
   3. Writing memos, letters, and other communications
   26. Feeling that I have too heavy a workload, one that I cannot finish during the normal day
   27. Complying with state, federal, and organizational rules and policies
   31. Feeling that meetings take up too much time
   32. Trying to complete reports and other paper work on time

II. Administrative Responsibilities
   2. Supervising and coordinating the tasks of many people
   14. Speaking in front of groups
   21. Preparing and allocating budget resources
   24. Being involved in the meet and confer process
   25. Evaluating staff members’ performance
   29. Administrating the negotiated contract (grievances, duties, interruptions, etc.)
   35. Trying to gain public approval and/or financial support for school programs

III. Interpersonal Relations
   3. Feeling staff members don’t understand my goals and expectations
   7. Trying to resolve differences between and among students
   13. Trying to resolve differences with my superiors
   20. Trying to resolve parent/school conflicts
   23. Handling student discipline problems
   33. Trying to resolve differences between/among staff members
   34. Trying to influence my immediate supervisor’s actions and decisions that affect me
IV. Intrapersonal Conflicts

4. Feeling that I am not fully qualified to handle my job
5. Knowing that I can’t get information needed to carry out my job properly
10. Imposing excessively high expectations on myself
15. Attempting to meet social expectations (housing, clubs, friends, etc.)
17. Having to make decisions that affect the lives of individual people that I know (colleagues, staff members, students, etc.)
22. Feeling that I have too little authority to carry out responsibilities assigned to me
28. Feeling that the progress on my job is not what it should or could be

V. Role Expectations

6. Thinking that I will not be able to satisfy the conflicting demands of those who have authority over me
8. Feeling not enough is expected of me by my superiors
11. Feeling pressure for better job performance over and above what I think is reasonable
16. Not knowing what my supervisor thinks of me, or how he/she evaluates my performance
18. Feeling that I have to participate in school activities outside of the normal working hours at the expense of my personal time
19. Feeling that I have too much responsibility delegated to me by my superior
30. Being unclear on just what the scope and responsibilities of my job are