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The effects of rotating schedules and weekly tutoring groups on the measured amounts of burnout experienced by teachers who bedside tutor students with low response levels

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The Effects of Rotating Schedules and Weekly Tutoring Groups on the Measured

Amounts of Burnout Experienced by Teachers Who Bedside Tutor

Students with Low Response Levels

by
Cara Davis Tomasco

A Thesis

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ABSTRACT

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The Effects of Rotating Schedules and Weekly Tutoring Groups on the Measured
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Dr. Jay Kuder
Master of Arts in Special Education

The purpose of this study was to determine if levels of burnout experienced by seven teachers who bedside tutor medically fragile students with low response levels was reduced when two interventions were implemented. over an eight week period. Intervention One was rotating half-hour tutoring schedules. Intervention Two was weekly one hour tutoring groups.

The Maslach Burnout Inventory, Third Edition, a self-administered inventory, used to measure occupational stress and burnout, was implemented to gain baseline scores, and scores after Interventions One and Two. The scores were categorized under the subscales Emotional Exhaustion, Depersonalization, and Personal Accomplishment.

Results showed a decrease in feelings of emotional exhaustion and depersonalization, but also showed a decrease in feelings of personal accomplishment. No demographic information could be linked to increases and/or decreases in levels of experienced burnout using this study. The findings suggest that stress and burnout are personality based, and that interventions, such as support groups and increased administrative support should be included in this research.

MINI ABSTRACT

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should be researched.

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Chapter One

<u>Introduction</u>

Stress related to teaching cuts across all educational areas. This includes elementary and secondary levels, as well as regular and special education. Special education teachers can especially have difficulties with stress due to the many unique challenges they face everyday. The consequences of stress and burnout can lead to teacher attrition, emotional exhaustion, low morale and job satisfaction, and negative attitudes toward students.

Working with medically fragile, technology dependent, low response level students, most diagnosed with persistent vegetative state, in a bedside tutoring venue, housed within a sub-acute care pediatric facility, is a challenging task that can cause significant amounts of stress. Students with very low response level show little if no progress. All education is conducted on a sensory level. Skills and teaching strategies that teachers were encouraged to learn and implement during their coursework cannot be applied. Everything teachers were taught to look for to assess and measure students' progress, such as enthusiasm, smiles, increased effort, completed work and test scores, are not applicable. Due to the nature of this setting, teachers acquire feelings of guilt, depression, anxiety, boredom, low motivation, resentment, ineffectiveness, lessened creativity, frustration, and isolation, all which lead to burnout and stress.

Teaching medically fragile, low response level students within the field of special education is ever growing. The more advanced medical technology

becomes, the more children who are medically fragile, will need to be educated. More and more teachers will be recruited for this field. If there are interventions to alleviate stress, maybe teachers' feelings will change about bedside tutoring low response level students.

Problem Statement

The following is the question to be examined by this study. Do weekly tutoring groups and shortened intervals of instruction time improve the feelings teachers have regarding bedside tutoring students with low response levels?

Bedside tutoring is defined as one on one tutoring of a medically fragile child with little or no response level, at their bedside, or while the student is in their wheelchair, in the student's room, which is housed within a sub-acute care pediatric facility.

Shortened intervals of instruction include half hour rotating instruction time with different students, instead of two-hour instruction time, over a two-hour period.

Weekly tutoring groups are defined as 2-3 teachers and their students getting together at least for one hour, once a week, to do small group activities. Low response level is defined as little or no vision, hearing, speech, body movements (other than reflexive body movements), limited positioning ability, technology dependent, and no visible signs of awareness of surroundings.

Medically fragile, technology dependent students in this sample twenty-four hour skilled care pediatric facility are children ages three to twenty-one, who have one or all of the following: tracheotomies, gastrointestinal feeding tubes, heart monitors, ventilators, room air or Oxygen hook-ups, and/or are bed or wheel chair bound.

Teachers' feelings are defined as low motivation, depression, guilt, frustration, anxiety, boredom, ineffectiveness, resentment, lessened creativity, lessened creativity, and isolation directly before the tutoring session, as well as during the tutoring session.

Hypothesis

Interventions, such as rotating half-hour intervals of instruction time and weekly one hour tutoring groups, will improve the feelings teachers have regarding bedside tutoring, and in turn alleviating stress levels.

Purpose

In this study, I hope to find that by using socialization and shortened instruction times, teachers will feel more motivated and less stressed about bedside tutoring students with low response levels.

Shortened intervals of instruction time with different students may give the teacher a chance to complete an activity in the allotted time. There is less chance of boredom, guilt, ineffectiveness, or resentment, because only one half

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hour of time is used for instruction, which can easily be filled compared to a two hour time slot.

Working side by side with a colleague provides support, communication, and motivation and may alleviate feelings of isolation.

These approaches will cost nothing, nor will need more personnel or extra materials. All that is needed is a room for tutoring groups and rescheduling, within the already given tutoring times, by the teachers.

When these interventions are implemented, students should receive quality instruction due to less stressed, more motivated teachers. Teachers will become more enthusiastic about their jobs, leading to improved morale, job satisfaction, and teacher retention. Teacher fulfillment and quality teaching, which these approaches hope to provide, are integral factors of school success.

Overview

Chapter Two will review literature that reveals the causes of teacher burnout and stress in the fields of regular and special education, prior studies that have been accomplished that suggest preventative measures and strategies used to relieve stress, and how this study can add to the already completed research.

Chapter Three will discuss how teacher stress and burnout will be measured, what interventions are going to be implemented, the population to be studied, and the procedures used to carry out this research.

Chapter Four will analyze data resulting from the measuring instrument, the interventions, observations and results.

Chapter Five will include a discussion and summary of findings, conclusions, and further recommendations.

Chapter Two

Research Review

Occupational Stress is defined as a particular relationship between the person and environment that is appraised by the person as straining and/or exceeding his or her resources and endangering his or her well-being (Todis and Singer, 1991). Stress is often accompanied by physiological changes in a person, such as increased heart rate and blood pressure, resulting from aspects of a job. These physiologic changes are mediated by the perceptions that demands made upon a person constitute a threat to their self-esteem, their well-being, and to their coping mechanisms used to reduce the perceived threat (Capel, 1992; Boyle, Borg, Falzon and Baglioni, 1995). Pithers and Soden (1999) simplify the definition by stating it as a negative feeling or unpleasant emotional state resulting from work.

Stress is the body's reaction to the stressors we encounter. When confronted with stressors the body creates extra energy. Stress occurs because our bodies do not use up all the extra energy that has been created (Adams, 1999). Adams (1999) breaks down stress into three levels. The first is an alarm reaction. Stress levels are at their highest and the body responds physiologically. The second level is the stage of resistance, which is the body's attempt to adapt to situations and stress begins to reduce. Third, the body's defenses toward stress become totally depleted, physical and mental breakdown occurs, individual performance plummets and illness may develop.

Stress can be a challenge, and not necessarily in a bad way. It can build up easily, however, and may lead to an emotional response and affect physical health (Schamer and Jackson, 1996). Adams (1996) affirms that a certain amount of stress is needed to be productive. "Eutress" is a term used to describe good or productive amounts of stress and distress is often considered bad amounts of stress. Productivity levels decrease when individuals are over or under stressed. According to Kieffer (1994), stress is neutral and how one reacts to the stress itself is what creates physiological and psychological problems.

Stress is an adaptive response that is moderated by individual characteristics and/or psychological processes. Stress is a consequence of any event or situation that places special physical and /or psychological demands on a person (Adams, 1999). Boyle et al. (1995) states that stress will vary differently among individuals even when objective external conditions are the same. Adams (1999) agrees that internal characteristics may determine physical and emotional responses exhibited by individuals as a result of stressors. She describes three concepts involved with stress and the individual. The first concept states that situational demands or stressors cause an individual to adapt. Secondly, individuals tend to react and adapt in different ways to the stressors they are presented. Finally, some form of physical and/or psychological response will occur.

Stress occurs in all workers. Compared to people in other professions, teachers have the highest level of occupational stress (Capel, 1992). Up to one third of teachers surveyed in the United States and Britain, report their job as

stressful or extremely stressful (Pithers and Soden, 1999). According to Boyle et al. (1995), teacher stress results from the combined effects of teacher and school characteristics. These include potential, actual, and perceived stressors, stress reactions, health status, personality and coping mechanisms, as well as non-work related life event stressors. Even though there are differences in socio-demographic variables such as age, experience, gender, and teacher rank, evidence suggests that stress has an impact on most teachers (Boyle et al., 1995). A person's body responds to psychological and physical stress by preparing for "fight or flight". These responses are inappropriate for classroom teachers. They will therefore undergo physical changes needed to respond to a physical threat. Most teachers, however, can only respond with mental activity or inactivity (Kieffer, 1994).

Burnout is regarded as a final step in a progression of unsuccessful attempts to cope with negative stress conditions. Stress is inevitable, burnout is not. They are not interchangeable (Sarros and Sarros, 1992). Seidman and Zager (1986/87) define burnout as anxiety, tension, emotional and physical exhaustion in response to job related stress with eventual attitudinal and behavioral changes occurring as a result. Burnout is a syndrome of inappropriate attitudes toward clients and self in association with physical problems and deterioration of performance.

Teacher burnout, more specifically, is a negative pattern of responses to teaching events and situations, students, and teaching as a career (Seidman and Zager, 1986/87). Schamer and Jackson (1996) explain that burnout is a

perceived state of physical and emotional exhaustion; this develops into negative attitudes toward students, emphasized by a belief that the teacher feels he or she is lacking in personal accomplishment. This cycle produces unhappy teachers who do not relate well to their students, become overwhelmed and confused, or who become physically and psychologically ill. Wisniewski and Gargiulo (1997) agree that intense, frequent periods of stress can cause behavioral, physiological, and psychological responses. If these responses accumulate over time, the level of stress being experienced can lead to burnout. Sarros and Sarros (1992) summarize burnout as a syndrome that often occurs as a result of unremitting work stress combined with other work conditions such as lack of positive feedback and limited opportunity for career progression. Friedman (1995) explains that burnout is a process, not an event that begins with perceived stress afflicting the individual. How an individual perceives the significance of the discrepancy between effort (input) and reward (output) can lead to burnout.

Burnout is a particular reaction to stress. It is considered a syndrome of physical and emotional exhaustion produced by excessive demands of energy, strength and resources of the individual. Burnout also leads to psychological disengagement from those whom one serves (Cherniss, 1988; Banks and Necco, 1990). Eichinger, Heifetz, and Ingraham (1991) summarize Maslach's definition discussing the three features of burnout. The first is emotional exhaustion, where the teacher feels there is nothing left to give on either an emotional or psychological level. The second is depersonalization. This includes detachment psychologically and social distancing that is disruptive both personally and

professionally. Third, is the perceived lack of personal accomplishment. The teacher no longer feels effective in their responsibilities toward students, colleagues, and parents. Kudva (1999) has similar steps defined as loss of enthusiasm, or when expectations are not met and enthusiasm falters. Frustration, which is one of the earliest signs of burnout, is the second feature and leads to low morale. And finally, alienation, where the individual feels isolated from their work environment and may result in a feeling of powerlessness, loss of meaning in work, detachment, and withdrawal.

Farber (2000) concludes that burnout cannot be defined as "uni-dimensional". The individual affects the path the burnout process takes. He breaks this down into three subtypes. The first is named the worn-out subtype. The individual, when confronted with too much stress and too little gratification, essentially gives up or performs work merely as a duty. The classic or frenetic subtype of burnout describes an individual who works increasingly hard, to the point of exhaustion, in pursuit of gratification or accomplishment that matches the extent of stress experience. The last subtype of burnout is the under-challenged subtype. The individual is not faced with an excessive degree of stress or workload, but rather with monotonous and under-stimulating work condition that fail to provide sufficient rewards.

Ever since clinical psychologist, Herb Freudenberger used the term "burnout" in 1974, studies have been done investigating the manifestation of this syndrome affecting teachers (Berg, 1994). Burnout occurs among professions working with people, especially people troubled or experiencing difficulties

(Schamer and Jackson, 1996). Burnout is connected with the emotional strain of working frequently and intensively with other people. This affects, particularly, human service professional, such as, nurses, physicians, social workers and teachers (Van Horn, Scaufeli, and Enzman, 1999). According to Sarros and Sarros (1992), burnout is the failure of a job to satisfy and challenge the motivational needs of human service professional whose work is centered on other people. Currently, burnout has come to be used in conjunction with teachers more than any other occupational group. Teachers tend to be affected by burnout more than any other public service professional (Adams, 1999; Schamer and Jackson, 1996; Capel, 1992). Farber (2000) reports that five to twenty percent of all teachers are truly burned out. Obviously, teachers are truly affected by stress that ultimately leads to burnout. Much research has been completed as to the causes of this intense stress for regular or general education teachers. Teaching has been considered a routine job in the past, but it has become an increasingly complex profession. Diverse responsibilities and changing ideas have made teaching more stressful. Terry (1997) describes three categories that cause burnout. The first category includes causes that are inherent to the profession, such as inadequate training that leads to unrealistic expectations, unclear methods of evaluation, classroom management and instruction. The second category includes causes that are intrinsic to the individual, such as unrealistic expectations, amount of experience, and locus of control. Lastly, the third category is causes that are fundamental in our society

and culture, such as how the public views the profession and the effects of today's society.

Banks and Necco (1990) add to the literature on inherent causes of burnout. They find that as the amount of volume of workload or caseload increases, so does burnout. Stress in workload is when the burden exceeds a person's ability to handle it (Starnaman and Miller, 1992). A teacher's perception of fairness in workload is related to morale and teacher satisfaction. If the workload is perceived unfair, absenteeism increases, motivation drops, and teachers become unproductive; all behaviors that lead to burnout (Reyes and Imber, 1992). Large classes, limited resources, interruptions, fixed curriculums, salaries, administrative demands, poor physical environments, student misbehavior and excessive paperwork are all stressors inherent to the teaching profession (Boyle et al., 1995; Capel, 1992; Reyes and Imber, 1992; Schamer and Jackson, 1996; Pithers and Soden, 1999; Van Horn, 1999; Farber, 2000). Teachers work in limited contact with other staff and almost constant contact with students in overcrowded classrooms. This limited contact leads to isolation, another cause of burnout (Starnaman and Miller, 1992).

Teachers may also become emotionally exhausted when the social climate of the classroom begins to deteriorate and isolation increases. Negative attitudes toward students may begin to develop. Teachers need to feel valued in their work by receiving positive feedback from their students. When discrepancies increase between teacher efforts and valued outcomes, such as, student progress, enthusiasm, and gratitude, consequences including energy

depletion, negative feelings, and eventual burnout will develop (Van Horn et al., 1999). Van Horn et al. (1999) also adds that a prolonged absence of positive feedback from students generates a sense of uselessness. Among all the various student behavior patterns, student disrespect was most likely to predict teacher burnout (Friedman, 1995).

Every teacher experiences stress. However, most demographic variables have inconsistent relationships to education burnout (Berg, 1994). Capel (1992) agrees that results from research have not related stress and burnout to factors, such as: age and sex. The one major factor that does seem to affect stress levels is the difference between age and experience of teachers. Research suggests that younger, less experienced teachers report higher levels of stress than older more experienced teachers (Berg, 1994; Banks and Necco, 1990). Greer and Greer (1992) agree that the greatest amount of stress experienced, and the greatest risk of burnout occurs during the first three years of teaching. New teachers who are the most idealistic and feel the most heavily responsible for teaching students are more susceptible to burnout (Schamer and Jackson, 1996). Kieffer (1994) explains that beginning teachers often experience as much stress, if not more, than veteran teachers do. Beginning teachers' idealism and beliefs in their abilities to make a difference often do not survive the frustrations of their teaching situation. These teachers become overwhelmed. They do not have the confidence or stamina to survive; they become discouraged, and ultimately, burned out.

Specific demographic factors may not directly cause stress and burnout, but stress and burnout definitely do result from the interaction between the individual, environment, and psychological factors (Capel, 1992). Stress reactions and burnout are not solely the result of external sources, but are determined to a large extent by an individual's perceptions and interpretations of stressors and their coping mechanisms (Boyle et al, 1995). Guglielmi and Tatrow (1998) concur that there are many factors within a teacher's work environment that can be stressful, or perceived as such, by the individual. Each of these stressors can be lessened or made more severe under different conditions and by different people with probably hundreds of different individual characteristics. Teacher health and performance is affected when the amount of stress a teacher experiences is proportional to the "misfit" between the person and their coping and defense mechanisms, social backgrounds and situational constraints (Pithers and Soden, 1999). Boyle et al. (1995) add that if individuals perceive a threat to their self-esteem or security, their coping mechanisms are unable to mediate adequately. Some teachers cope positively to stress, some do not. Teachers with low ego strength, a high state of anxiety, and poor sense of organization were more apt to be enervated emotionally and have negative attitudes toward students (Seidman and Zager, 1986/87). Boyle et al. (1995) agree that responses and reactivity to stimuli varies with strength of excitation of the nervous system. Teachers with discernable neurotic tendencies tend to be more susceptible to stress reactions, burnout, and slow recovery. Seidman and Zager (1986/87) add that the inability to cope positively with teacher problems

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has been related to teachers feeling stressed, lowered job morale and satisfaction, as well as a desire to leave the profession. All of these feelings are due to high levels of psychological and physical distress experienced.

Friedman and Farber (1992) discuss the relationship of self-concept and self esteem in relation to burnout. Self-concept is an individual's overall evaluation of his or her own traits, abilities, and goals in relation to others and the environment. When there is a discrepancy in self- concept, where a person thinks her or she is a good professional, performing at a high level, but then also feels a low level of professional self- satisfaction, stress and burnout increase. Teachers who have a lack of self-esteem and need for self- actualization, which is not fulfilled, are also more likely to experience burnout (Friedman and Farber, 1992).

Schamer and Jackson (1996) relate teacher burnout to higher and lower order professional objective and needs. When a teacher's higher order professional objectives cannot survive their lower order needs, the need for self - preservation increases, and enthusiasm, creativity and caring fall by the wayside. The lower order needs take their toll and teachers become fatigued. Good teachers become lost due to the lack of positive rewards for their daily activities and for lack of professional freedom.

Differences between internal and external locus of control affect the ability to cope with stress levels and burnout (Banks and Necco, 1990; Capel, 1992). Capel (1992) defines locus of control as the general perception of the relationship between behavior and the events which follow that behavior. A

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teacher with an internal locus of control acknowledges that events are contingent on his or her own actions. Those with an external locus of control feel events occur due to fate or interaction of others. Banks and Necco (1990) have concluded that an individual with an external locus of control has a greater likelihood of experiencing burnout because they feel they are not capable of changing their situation. A person with an internal locus of control can better handle stress. Feeling more in control, situations are more predictable and therefore less stressful (Capel, 1992).

There are also causes of stress and burnout for teachers related to our society, culture, and life outside the classroom. Rapid changes in the world and technology have caused some teachers to feel incompetent. They experience stress because of their inability to remain current and up to date (Adams, 1999). While the nature of a teacher's role becomes more multifaceted- fund raising, attending, committee meetings, and conferences, unions, tenure, litigation, accountability, and program planning- society continues to under-evaluate the work of educators. Our culture often promotes conditions that create stress (Terry, 1997; Farber, 2000). Finally, stressors in life can affect work satisfaction. Marriage, divorce, pregnancy, death of a loved one, change in residence, and sleeping and eating habits all can affect coping and adaptation abilities. This, in turn, increases stress that leads to burnout (Terry 1997; Adams, 1999).

While professional stressors and individual coping and adaptation are significant sources of stress, most studies seem to agree that the major cause of teacher stress is lack of administrative and organizational support. Fimian (1986)

states that teacher stress levels and burnout are strongly related to the degree to which the teachers receive on the job administrative and supervisory support. Support from the principal is a consistent predictor of teacher burnout (Sarros and Sarros, 1992; Seidman and Zager, 1987). Lack of support, supervisory incompetence, unavailability, and poor communication skills are consistently reported by teachers as significant stressors (Fimian, 1986; Farber, 2000). Teachers expect something in return for their efforts: fair salaries, promotions, self-esteem, and especially support from their supervisors (Van Horn et al., 1999). When positive feedback from the principal is missing, feelings of inconsequentiality and loss of self-esteem arise (Sarros and Sarros, 1992).

Due to this lack of support, issues of role ambiguity and role conflict increase. Starnaman and Miller (1992) define role ambiguity as patterns of behavior required by all individuals playing a part in a given functional relationship. If the person holding a position is not sure of what their role consists and how role performance is measured, stress is certainly going to increase (1992). Starnaman and Miller (1992) also define role conflict. Role conflict is defined as an individual's identification with a role and an opposing demand from a supervisor or organization. The individual is actually receiving conflicting instructions or demands within the position's requirements. Role ambiguity and role conflict decrease organizational commitment and personal accomplishment, and increase depersonalization and emotional exhaustion, all key factors that lead to burnout (Pithers and Soden, 1999).

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Stress and burnout affects all educational fields. Even though studies show special education teachers experience less stress than their regular education counterparts, they are definitely not exempt from the causes and effects of teacher stress and burnout (Banks, and Necco, 1990; Capel, 1992). Stress and burnout have been identified as significant problems in special education (Cherniss, 1988).

Special education has become a dynamic culture with constant and continued changes in student population, personnel, services and settings. The special education teachers' job has become more burdensome. Due to the diversity of students who are disabled, the field of special education may become exhausting (Correa, 1990).

As in regular education teaching, special education teachers experience stress due to more environmental and psychological factors than demographic factors (Billingsley and Cross, 1991). According to Brownell (1997), due to the increasing demands to be accountable, special education teachers' work is becoming more intense. Teachers who enter special education do so because of their desire to help children. This dedication makes for good teacher commitment, but also makes it difficult to leave their work at school. The more empathetic, sympathetic, idealistic and people oriented a teacher is, the more vulnerable they are to stress (Brownell, 1997). Greer and Greer (1992) add that when special education teachers are training for their profession, they learn to identify the students' individual needs and develop Individualized Education Programs. This training is necessary, however it may develop the expectation

that being a successful teacher means having the ability to solve all of their students' problems.   Often the problems these students have are due to sociological factors, such as poverty, child abuse, and single parent families. Teachers who become too closely involved with a student's personal and family problems, often experience high amounts of stress (Brownell, 1997).

During early years of teaching, special education teachers attempt to manage all of the needs of students, as well as instruction, behavior management, collaboration, and paperwork. When their expectations and sense of idealism are not met or rewarded, stress levels and burnout are increased.

The type of disability a special education teacher is working with may also affect a teachers stress level.   Frank and McKenzie (1993) have found that teachers of students with behavior disorders encountered higher amounts of stress than special education teachers with other types of disabilities. This may be due to a teacher's fear of verbal or physical abuse (Billingsley and Cross, 1991). Wisniewski and Garguilo, (1997) and Banks and Necco, (1990) agree that the emotionally demanding nature of behavior disorders within the classroom leave the teachers of that class at risk for burnout. In comparison, Todis and Singer (1992) have found that special education teachers working with students with speech, hearing or vision disabilities may be especially susceptible to stress and burnout.

Isolation and lack of collegial support also contribute to teacher stress. Often students with disabilities participate in a "pull out" program with special education teachers to remediate problems. Pulling these students out from the

regular classroom leads to stigmatization and isolation, which in turn extends to the special education teacher. This leaves the special education teacher to cope with challenging student behaviors and academic difficulties without collegial support or respect. This lack of support creates higher occurrences of stress and burnout (Brownell and Smith, 1993).

Wisniewski and Gargiulo (1997) found those professional interactions regarding inclusion between regular and special education teachers also creates stress. In mainstreamed classrooms, regular education teachers may perceive the role of the special education teacher as fully responsible for the education of the student with disabilities. Special education teachers view mainstreaming as collaborative. Often, however, the burden is placed on the special education teacher for instructing students with learning and behavior problems. This conflict becomes highly stressful (Brownell and Smith, 1993).

This role ambiguity and conflict, as well as lack of support, extend to the administrative level. Billingsley and Cross (1991), have found that special education teachers had higher role conflict and ambiguity than regular education teachers. Poor quality of feedback, unreasonable work expectations, and lack of recognition are a few examples of inadequate administrative support. Special education teachers feel little support, combined with a wide range of student abilities and behaviors, is given (Brownell and Smith, 1993). The perception of ineffectiveness leads to non- rewarding experiences and a perceived lack of success, which contributes to low self- esteem and eventual burnout (Billingsley and Cross, 1991).

Not only does insufficient social support increase stress and eventual burnout, so also do the everyday duties a special education teacher needs to perform. Excessive paperwork and caseloads (Billingsley and Cross, 1991) and inadequate materials and resources contribute to stress (Brownell and Smith, 1993). Daily, special education teachers deal with slow student progress, diversity of student needs, and discipline issues. Special education teachers may have fewer opportunities to experience positive contact with students due to excessive paperwork and administrative requirements (Billingsley and Cross, 1991). Wisniewski and Gargiulo, (1997) add that when schools create performance expectations but fail to provide materials and resources, teacher uncertainty develops. Special education teachers are often expected to implement "best practices" without adequate support or resources.

Time management also creates a significant amount of stress. Students with special needs put increasing demands on time and energy (Klas and Hawkins, 1997). Combine this with all of the other aforementioned stressors, if left unresolved, will lead to burnout and more than likely teacher resignation (Wisniewski and Garguilo, 1997).

Special education teachers who instruct students with severe and profound disabilities and medically fragile/technology dependent students also experience stress and burnout. The causes of stress and burnout for these teachers overlap with those of regular education teachers and special education teachers of students with mild to moderate disabilities. There are a few distinct causes, however, specific to the teacher of the severe and profound and

medically fragile and/or technology dependent students. According to Wadsworth (1993) the Department of Education found that students with physical disabilities, orthopedically disabled, other health impaired disabilities, multiply disabled, technology dependent and students diagnosed with HIV and AIDS are the fastest growing population in need of special education services. There are a greater number of medically fragile children surviving early medical crises because of constant improvements in medical technology (Bartel and Thurmann 1992; Prendergast, 1995).

Bartel and Thurmann (1992) define medically fragile as individuals with complex medical needs who remain alive through medical care and often technology such as ventilators, dialysis and apnea monitoring, that continues throughout their lives. The degree of severity due to a single impairment or a combination of impairments varies with each person (Essex, Schifani, and Bowman, 1994). Because of their limited strength, vitality and/or alertness due to chronic illness, medically fragile and /or technology dependent students are adversely affected in their educational performance (Sirvis, 1988).

Teachers who work with students who are medically fragile and/or technology dependent are often fearful of the complex medical needs of their students (Wyly, 1990). According to Greer and Greer (1992), special education teachers often have to deal with the problems of multiple disabilities in conjunction with health impairments that may result in life threatening situations. A teacher may feel very threatened or uneasy by the presence of a student who has a weak heart, tires easily, may become slightly blue or need scheduled

medication (Wadsworth, Knight and Barber, 1993). Some teachers may over-identify with a student who is disabled, suffering from pain, and/or who was abused or neglected. This empathy often leads to an emotional drain, and losses of energy and resources teachers bring to the job (Greer and Greer, 1992). Because teachers may not be able to avoid sharing their students' experiences in a personal way, they may begin to detach or distance themselves from their students (Greer and Greer, 1992). Along with the emotional factors, the medical services and or setbacks can seriously disrupt and interrupt instruction (Bartel and Thurmann, 1992).

Many causes of stress and burnout are similar for both teachers students with severe and profound disabilities and medically fragile and/or technology dependent. Most of these teachers have found that their university coursework and pre-service training was insufficient to successfully instruct these students (Izen and Brown, 1991). Strassmeier (1992) has found that the most significant predictor of burnout is a teacher overburdened by their work with students with profound disabilities and/or medical fragility. These teachers often become frustrated by attempting to implement the "best practices" for their students and by the lack of consensus on the meaningful outcomes for programs serving these students (Izen and Brown, 1991).

Finally, the lack of collegial and administrative support is a cause of stress and burnout for teachers of students with severe or profound disabilities and medically fragile. Often there are disagreements on instruction, lack of

knowledge, and limited cooperation and sharing of resources to help these teachers (Strassmeier, 1992).

When burned out teachers direct their energy toward basic survival, getting through the day is the first priority (Wisniewski and Gargiulo, 1997). The effects of burnout are extremely detrimental. Most of the symptoms are categorized into two broad areas, psychological/behavioral and physical (Kudva, (1999); Schamer and Jackson, 1996). A deterioration of the quality of services given by the teacher is a result of burnout. This includes a reduction in professional commitment, less focus on instructional tasks, a decreased ability to concentrate, and more disorganization (Wisniewski and Gargiulo, 1997). Stern and Cox (1993) add to this that a burned out teacher will tend to display almost no enthusiasm for the subject matter, or for teaching. He or she will not be receptive to answering questions, responding to student needs, or encouraging a student to learn. Every type of student is affected when a teacher experiences burnout. Unenthusiastic students will not be challenged or motivated. Eager students may become frustrated or bored. When a teacher is unapproachable, dull, unimaginative, disinterested and avoiding contact a student's educational experiences will be hindered (Stern and Cox, 1993).

Some of the psychological and behavioral effects include isolation, hostility, cynicism, withdrawal from colleagues, moodiness, paranoia, depression, sadness, overeating, absenteeism (Terry, 1997), anxiety, frustration, (Schamer and Jackson, 1996), sarcasm, boredom (Kudva, 1999), inferiority, helplessness, and loss of control (Wisniewski and Gargiulo, 1997).

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The physiological effects of burnout are widespread. They include, but are not limited to, migraines, hypertension, gastrointestinal, problems, increased blood pressure Terry (1997), ulcers, stomach disorders (Schamer and Jackson, 1996), insomnia, fatigue, memory problems, dizziness, (Kudva, 1999), colds, weight problems (Adams, 1999), and increased immune weakness (Boyle et al, 1995). A teacher's ability to achieve a rewarding career due to these effects of burnout, may potentially end in a teacher leaving his or her job (Terry, 1997).

Terry (1997) describes another extreme effect of long term, unrelieved stress as terminal burnout. Terminal burnout occurs when a teacher turns to drug and alcohol abuse and eventually psychiatric breakdown occurs. The implications of all of these damaging effects of burnout, ultimately impedes learning and makes schools ineffective and unrewarding places (Schamer and Jackson, 1996). The entire organization becomes "dispirited" (Seidman and Zager, 1987). Unfortunately, these effects are not only felt by the teachers, but by the entire educational community, the teacher's family, the students, the administrators, and all of society (Friedman and Farber, 1992).

Prevention and coping strategies for stress and burnout are primarily interchangeable. The strategies to prevent stress can also serve as interventions for coping with stress and burnout. In order to prevent and cope with stress and burnout, Brownell (1997) suggests two ways of coping with stress: active and inactive. Active strategies attempt to change the source of the stress, where inactive strategies do not change the source of stress, but just try to reduce it (Brownell, 1997). Cooley and Yovanoff (1996) define coping as the attempts a

person makes to master a challenging or difficult situation. Coping does not always mean success, but just the efforts to deal with a situation. Cooley and Yovanoff (1996) similarly categorize coping strategies as Brownell (1997) does, but renames them direct and indirect strategies. Kieffer (1994) also lists coping strategies comparable to the aforementioned. They are emotion focused, change individuals thinking without changing the situation; problem focused, changing the individuals behavior, the situation or both; and preventative, learning to relax and balance high stress activities with low stress activities. Schamer and Jackson (1999) also define their categories the same way but recategorize them into prevention, coping, and dealing with consequences.

Kossack and Woods (1986/87) explain the measures that can be used to recover from burnout. The first is a period of emotional withdrawal, such as a leave of absence or time off. The second is to examine priorities and balance favored tasks with draining ones throughout the day. Third, could be to leave the profession or begin tutoring. Lastly, therapy may be needed with an objective counselor. Berg (1994) categorizes prevention and coping strategies into two groups; first order changes, where the individual has to change there response to stress and take measures to reduce or prevent it, and second order changes, where changes are needed on the organizational and administrative level to prevent, identify and alleviate stress and burnout.

The suggested strategies forthcoming are divided, as Berg (1994) suggests, into first order and second order categories. Burnout is a syndrome resulting from prolonged teacher stress with characteristics of physical, emotional

and attitudinal exhaustion. Burnout must not be seen as a weakness of an individual. Teachers cannot be blamed (Capel, 1992). Teachers, as individuals, can take measures to prevent and alleviate stress that leads to burnout. Knowing one's self and one's emotions can help manage stress (Adams, 1999). Recognizing and admitting that feelings of burnout are being experienced is the key to finding a remedy (Stern and Cox, 1993). Taking care of oneself is the first priority to prevent and cope with burnout. Taking part in a non-work related hobby or interest (Berg, 1994) can help. Appropriate amounts of sleep (Berg, 1994), a good diet (Schamer and Jackson, 1996; Terry, 1997; Kossack and Woods, 1987/88; Brownell, 1997), and exercise (Berg, 1994; Schamer and Jackson, 1996; Bradford, 1999; Kossack and Woods, 1987/88; Terry, 1997) make an individual feel better both physically and mentally (Brownell, 1997). Associating with psychologically healthy friends and colleagues (Berg, 1994; Luckner, 1996), and creating a peer support system (Wisniewski and Gargiulo, 1997), prevents and reduces isolation, especially for the special education teacher (Cooley and Yovanoff, 1996).

During the workday, teachers should include breaks (Kossack and Woods, 1987/88) and leave work on time (Lamb, 1995). Instruction and curriculum should be organized and prepared (Stern and Cox, 1993), limits to workload should be set without others adding to it (Bradford, 1999), new instructional techniques can be implemented (Lombardi, 1993) and realistic goals for students can be identified (Berg, 1994). All of these strategies make the workday less stressful.

Teachers need to determine long and short- term objectives (Stern and Cox, 1993; Luckner, 1990), targeting one area at a time, such as course work (Brownell, 1997). These objectives should be enjoyable to attain. Brownell (1997) also suggests focusing on the things you can change. Knowledge about your teaching, relaxation techniques and stress management can prevent and reduce stress and burnout. Teachers who feel effective and confident in their abilities are less vulnerable to burnout and more likely to gain personal satisfaction (Brownell, 1997).

District and school administrators are ultimately responsible for reducing stress in the school environment. Expecting teachers to manage stress in an unsupportive environment is unproductive for reducing stress (Brownell, 1997). Brownell (1997) concludes that the best prevention against stress and burnout are the efforts by the administrator to create more productive, caring, clearly defined work situations, while improving teachers' skills. Farber (2000) adds that schools should be "user-friendly" places for teachers as well as the students. Those that perceive that they work in a supportive environment experience lower levels of work stress and burnout overall (Sarros and Sarros, 1992).

Lack of administrative support is the most consistent predictor of burnout for all teachers (Sarros and Sarros, 1992). Support and recognition make an individual feel valued and a part of a network of communication by peers and supervisors (Fimian, 1986). In the process of receiving support, recipients experience less stress than non-recipients do. The availability and quantity of support can be a powerful moderator of occupational stress (Fimian, 1986).

The school environment should create a strong sense of self-efficacy by helping teachers gain confidence, expand knowledge, and grow to believe they can bring about student learning (Soto and Goetz, 1998). This can be accomplished by involving staff in decision-making, program development, and goal setting (Berg, 1994; Capel, 1992).

Administrators become a more meaningful source of support by listening more and talking less, discussing work related problems and concerns, and keeping staff informed of critically important matters, such as impending layoffs, salary raises, benefits and promotions (Cherniss, 1988). By involving staff in these matters, their sense of influence increases and their feelings of role conflict and ambiguity are reduced (Starnaman and Miller, 1992; Capel, 1992).

Administrators should also promote peer support. Peer support reduces uncertainty and aids in positive relationships with co-workers (Brownell, 1997). This is especially important for special education teachers. By providing these teachers with a strong support system, they can collaborate and problem solve with others, as well as help others understand the demands of their work (Sontag and Haring, 1996).

Administrators can also help teachers develop skills through formal training in instruction, collaboration, interpersonal communication, parent communication, problem solving and curriculum (Correa, 1990). Offering coursework relevant to an individual teacher's discipline linked with university programs can also increase teacher effectiveness and accomplishment (Adams, 1999). This college and university coursework should be relevant and related to

providing more realistic stress oriented induction into what the classroom is really like, developing skills to identify stressful situations, and teaching adaptive responses. Case-based instruction on the pre-service level is needed to improve decision-making skills. Brownell and Smith (1993) and Luckner (1996), feel that it is especially important to provide special education teachers with skills and learning opportunities appropriate to their classroom situation. This reduces uncertainty and increases efficacy.

Administrators need to also take coursework to learn to develop interpersonal competencies such as self-understanding, self-growth, skill acquisition, group process analysis, stress management, conflict resolution, and group problem solving (Billingsley and Cross, 1992). By learning these skills an administrator can better acknowledge feelings of teacher (Fimian, 1986), learn to give constructive feedback, give routine evaluation in clear delineated steps (Terry, 1997), and offer advice (Wisniewski and Gargiulo, 1997). An administrator should create a non-threatening and nurturing environment in which teachers share ideas and concerns (Correa, 1990).

Administrators should also be able to identify the emotional and physical signs of unproductive levels of stress to help alleviate possible burnout (Adams, 1999). To help teachers identify and prevent stress, administrators can offer stress identification, management and prevention workshops (Schamer and Jackson, 1996) and create a plan of action for stress during the formative stages rather than during a crises situation (Wisniewski and Gargiulo, 1997; Capel, 1992).

On the instructional level, administrators need to be aware of a teacher's workload before assigning duties, especially if those duties conflict with classroom instruction (Starnaman and Miller, 1992; Kossack and Woods, 1987/88). More paraprofessionals should be hired to assist with workloads (Berg, 1994), and materials and technology should be purchased to make instruction more effective (Correa, 1990).

Teachers, therapists and parents need to be brought together for comprehensive instruction (Sontag and Haring, 1996). Therapists should be integrated into the classroom, especially special education classrooms (Correa, 1990) and parent-teacher collaboration should be facilitated (Friedman and Farber, 1992).

This collaboration, as well as the addition of medical personnel, is needed for teachers of medically fragile and/or technology dependent students. Parents, teachers, therapists, and medical personnel must establish a working partnership to provide support for a child's needs (Sirvis, 1988; Wadsworth, Knight, and Barber, 1993; Prendergast, 1995); Bartel and Thurmann, 1992). This support begins at the pre-service level. Teachers need to know more about the students' health needs so that optimum instruction can be provided (Wadsworth, 1993). This can be accomplished by first reducing fear through learning medical terminology and gaining awareness of physical signs of distress, equipment warning signals, and repositioning techniques (Wadsworth, Knight, and Barber, 1993). In-services must answer questions about medically fragile and/or technology dependent students and help teachers learn how to be flexible in their

delivery of instruction. Medical and health procedures must be integrated with instruction (Graff and Ault, 1993) and medical and technology needs must be met before the student can benefit from educational services (Sirvis, 1988). Most importantly, teachers should avoid exaggerated deference to the medical implications of the students' impairment so as to normalize their educational experience as much as possible (Essex et al., 1994).

Pre-service and inserve training on the student's progress that is not obvious is essential (Greer and Greer, 1992). Teachers need to be taught methods designed to reinforce their own successes as well as their students. Greer and Greer (1992) suggest that teachers learn "detached concern" as medical professionals do. Detached concern is defined as an optimal balance between over-involvement and over-identification with loss of concern and depersonalization. Workers in the health care field, and now teachers, working with individuals who are sick or dying combat feelings of burnout would find it useful to employ "detached concern". They can also alleviate feelings of ineffectiveness by keeping records or logs of their successes and contributions to the well being of their students. Developing some form of record keeping, sensitive to subtle and limited changes in students' performance, and assessment to document even small measures of student progress, gives direct feedback to teachers, increasing efficacy and personal accomplishment (Greer and Greer, 1992).

My study will be researching the stress and burnout of teachers working with low response level, medically fragile and/or technology dependent students.

I intend to focus on interventions that alleviate the stressors that were acknowledged in this research review. These stressors include isolation, non-challenging and under-stimulating interaction and environment, lack of personal accomplishment and efficacy, frustration, and depersonalization. The interventions, in association with the research review, involve tutoring groups to provide social support, and rotating half hour instruction intervals to increase personal accomplishment and teacher effectiveness, as well as alleviating frustration, boredom, and depersonalization.

Chapter Three

Research Design

Subjects

The subjects of this study include eight teachers, all who bedside tutor low response level or diagnosed persistent vegetative state students.

Teacher One is a 28 year old female with her Bachelors Degree in Elementary Education and certified in Special Education. She is currently working toward her Masters Degree in Special Education. Teacher One previously taught preschool part-time. She has been bedside tutoring medically fragile, low response level students for 4 years 6 months. Her tutoring hours are from 9:00 AM to 12:00 PM, Monday through Friday.

Teacher Two is a 32 year old female with her Bachelors Degree in Mathematics and certified in Special Education. She is currently working toward her Masters Degree in Special Education. Teacher Two has been bedside tutoring medically fragile, low response level students for 5 years 8 months. Her tutoring hours are from 9:00 AM to 12:00 PM, Monday through Friday.

Teacher Three is a 31 year old female with her Bachelors Degree in Elementary Education and Special Education. She is not currently enrolled in school. Teacher Three previously taught preschool for three months. She has been bedside tutoring medically fragile, low response level students for 5 years. Her tutoring hours are from 9:00 AM to 12:00 PM, Monday through Friday.

Teacher Four is a 36 year old female with her Masters Degree in Instructional Technology and certified in Special Education. She is not currently

enrolled in school. Teacher Four previously taught at a Cerebral Palsy Center for three years and taught elementary education for one year. She has been bedside tutoring medically fragile, low response level students for 7 years 10 months. Her tutoring hours are from 10:00 AM to 12:00 PM, Monday through Friday.

Teacher Five is a 27 year old female with her Bachelors Degree in Early Childhood Education, Elementary Education and Certification in Special Education. She is not currently enrolled in school. She has been bedside tutoring medically fragile, low response level students for 5 years 6 months. Her tutoring hours are from 1:00 PM to 3:00 PM, Monday through Friday.

Teacher Six is a 28 year old female with her Masters Degree in Counselor Education and is currently emergency certified in Special Education. She is beginning her coursework for certification. Teacher Six has been bedside tutoring medically fragile, low response level students for 2 months. Her tutoring hours are from 8:00 AM to 5:00 PM, Monday through Friday.

Teacher Seven is a 28 year old female with her Bachelors Degree in Elementary Education and certified in Special Education. She is currently working toward her Masters Degree in Special Education. Teacher Seven previously taught preschool for two years. She has been bedside tutoring medically fragile, low response level students for 4 years 2 months. Her tutoring hours are from 1:00 PM to 3:00 PM, Monday through Friday.

Instrument

The instrument used to collect data is the Maslach Burnout Inventory (MBI), Third Edition, authored by Christina Maslach, Susan E. Jackson, and Michael P. Leiter. According to Maslach, Jackson, and Leiter (1996), this instrument is an inventory used to measure burnout categorized into three subscales: Emotional Exhaustion, which assesses the feelings of being overextended and exhausted by one's work; Depersonalization, which measures impersonal and/or unfeeling responses toward the recipients of instruction; and Personal Accomplishment, which assesses feelings of success, achievement, and competence in one's work.

The Maslach Burnout Inventory, Third Edition, Educator's Survey Form, is a self-administered inventory consisting of 22 questions using a six-point response format that relates to the frequency of the respondent's feelings. Items are broken down into: 0-never; 1-a few times a year or less; 2-once a month or less; 3-a few times a month; 4-once a week; 5-a few times a week; 6-every day. Degrees of burnout range from low to moderate to high based on the scores of each subscale. Score cutoff points are given to interpret scores for each subscale (Maslach, Jackson, & Leiter, (1996). They are as follows: Emotional Exhaustion- Low 0-16, Moderate 17-26, High 27+; Depersonalization- Low 0-8, Moderate 9-13, and High 14+. Personal Accomplishment is scored in reverse order in comparison to Emotional Exhaustion and Depersonalization. The higher the score, the lower the feelings of Personal Accomplishment. Feelings of personal accomplishment are- Low 37+, Moderate 31-36, and

High 0-30.

The MBI is also separated into three surveys: the Human Services Survey (HSS); the General Survey (GS); and the Educator's Survey (ES). The Maslach Burnout Inventory-Educator's Survey (MBI-ES) will be used for this study. This survey is generally the same as the other two surveys, except that the statements are phrased in terms of "Teacher-Student" (Maslach, Jackson, & Leiter, 1996).

Two factor analytic studies by Iwanicki and Schwab (1981), and by Gold (1984) were used to substantiate reliability and validity. Iwanicki and Schwab report Cronbach alpha estimates of reliability as .90 for emotional exhaustion, .76 for depersonalization, and .76 for personal accomplishment. Gold reports .88 for emotional exhaustion, .74 for depersonalization, .72 for personal accomplishment (Maslach, Jackson, & Leiter, 1996).

Convergent validity of the MBI-HSS is demonstrated by using external validation of personal experience (peer ratings), dimensions of job experience (job characteristics expected to contribute to burnout), and personal outcomes (outcomes hypothesized to be related to burnout) (Maslach, Jackson, & Leiter, 1996).

Maslach, Jackson, and Leiter (1996) state that discriminant validity is obtained by distinguishing the MBI from other psychological constructs that might be presumed to measure burnout. The MBI-HSS was compared to the scores of the JDS (Job Diagnostic Survey) "General Job Satisfaction" measure. Job satisfaction has a negative correlation with both emotional exhaustion (r=-.23,

p<.05.05) and depersonalization (r=-.22, p<.02), and a slightly positive correlation with personal accomplishment (r=.17, p<.06).

In comparison to the Crowne-Marlow Social Desirability Scale, Maslach, Jackson, and Leiter (1996) found none of the MBI-HSS subscales significantly correlated at the .05 level.

Environment

All research subjects work for a private not-for-profit school housed within a 24-hour subacute skilled care pediatric facility. They bedside tutor students, ages ranging from 3-21, who are medically fragile/technology dependent, low response level, and/or diagnosed Persistent Vegetative State in the student's room. Tutoring is either one or two hours, as mandated by the student's Individualized Education Plan.

Procedure

The MBI-ES is self-administered within 10 to 15 minutes. The subjects will be tested in a group session with dividers to insure privacy. A code number will be used as identification.

The test will be introduced to respondents with stress given on answering honestly. The directions will then be read aloud as the respondents follow on their inventories. When the test is completed, the examiner will make sure all test items are answered, then scored using a key. Each subscale will then be coded as low, average, or high, using numerical cutoffs.

After the test is administered, two interventions over an eight-week period will begin. The first intervention, rotating half-hour tutoring schedules, will be implemented over the entire eight weeks. At midpoint a second intervention, once a week one hour tutoring groups, will be added for the remaining four weeks. The nature of the interventions and how they will be accomplished will be explained to all participants.

The rotating schedules will be on Tuesdays and Thursdays, 10:00 AM to 12:00 PM, with teachers One through Four, and 1:00 PM to 3:00 PM, with teachers Five through Eight. Six students will be involved with the rotation from 10:00 AM to 12:00 PM. They will be labeled **A, B, C, D, E,** and **F**. Five students from 1:00 PM to 3:00 PM, will be part of the rotation, labeled **G, H, I, J,** and **K.** The rotating schedule as follows:

TEACHERS

	Teacher 1	Teacher 2	Teacher 3	Teacher 4	Teacher 1	Teacher 2	Teacher 3	Teacher 4
10:00-10:30	A	C	B	E	E	A	C	B
10:30-11:00	B	E	C	A	A	B	E	C
11:00-11:30	C	F	D	B	B	C	F	D

11:30-12:00	D	B	F	C	C	D	B	F

TUESDAY   **THURSDAY**

TEACHERS

Teacher 5 Teacher 6 Teacher 7 Teacher 8 ITeacher 5 Teacher 6 Teacher 7 Teacher 8

1:00-1:30	G	I	J	H	H	G	I	J
1:30-2:00	H	G	I	J	J	H	G	I
2:00-2:30	I	J	K	G	G	I	J	K
2:30-3:00	J	K	G	I	I	J	K	G

TUESDAY   **THURSDAY**

Every Tuesday and Thursday each teacher will be assigned a specific domain to work on during their student's half-hour time. These domains include sensory stimulation, environmental control, computer, range of motion exercises, arts and crafts, and games.

After the fourth week, the MBI-ES will be administered again in a group setting and scores will be tallied and recorded. Tutoring groups will be added on Mondays and Fridays, starting the beginning of the fifth week. Teachers One and Two will bring their students to group in the facility's Recreation room on Mondays from 10:00 AM-11:00 AM. Teachers Three and Four will bring their students to group on Fridays from 10:00 AM-11:00 AM. From 1:00 PM-2:00 PM, Teachers Five and Six will bring their students to group on Mondays, and Teachers Seven and Eight on Fridays.

After the eight-week intervention, the Maslach Burnout Inventory-Educator's Survey will be re-administered.

Data Analysis

This study uses a Pre-Post Research Design. The scores for the measurement instrument will be calculated using the Maslach Burnout Inventory Manual. The differences between the scores of the Pre and Post tests will be analyzed using a computer analyzable form.

Chapter Four

Results

This study researched seven teachers' feelings regarding bedside tutoring of students with low response levels. The Maslach Burnout Inventory, Third Edition, was implemented to determine baseline scores and scores after two interventions (rotating half hour schedules and weekly tutoring groups).

The data that were collected from this inventory were analyzed using paired T-Test methods for every comparison of baselines and interventions of mean scores under each subscale. Mean scores and standard deviations are presented in Table 1.

Beginning with the subscale Emotional Exhaustion, the baseline scoring revealed an moderate level (M=22.86, SD=7.71). After the first intervention there was a decrease within the moderate level (M=16.57, SD=8.72) with a mean difference of 6.3 (t=2.21, p<.07). The second intervention yielded a decrease to a low level score of Emotional Exhaustion (M=16, SD=8.69). This leads to the most significant statistic of the analysis, the mean difference of 6.8 (T=3.08, p<.02) between the baseline scores and the second intervention.

The mean difference between the first and second interventions was .57 (p<.72) which demonstrated no statistical significance. Results presented in graphic form in Figure 1.

Figure 1. Mean Values and Categorization of the Subscale Emotional Exhaustion
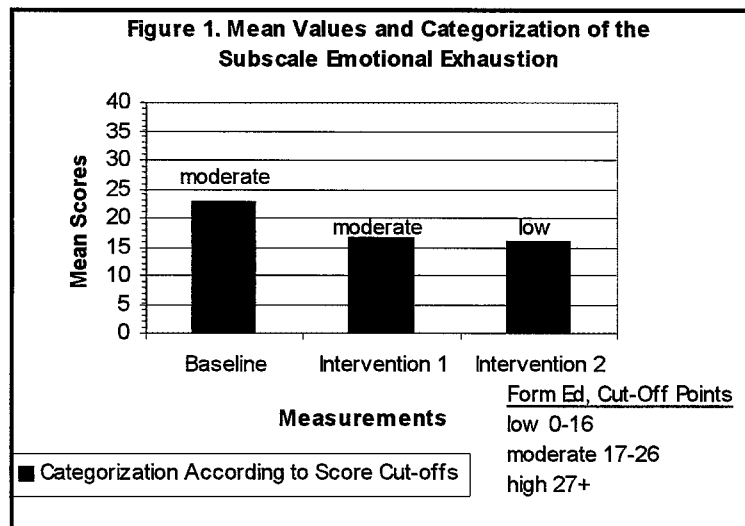
The baseline for the subscale of Depersonalization revealed an average low level (M=3.00, SD=4.62). After the first intervention scores slightly drop within the low level (M=2.43, SD=2.88) with a mean difference of .57 (p<.57). The second intervention demonstrated even lower scores within the low level categorization of experienced Depersonalization (M=1.71, SD=2.49) with a mean difference of 1.29 (p<.18) in comparison to the baseline and a mean difference of .71 (p<.22) in comparison to the first intervention, revealing no statistical significance. Results are presented in graphic form in Figure 2.

Figure 2. Mean Values and Categorization of the Subscale Depersonalization
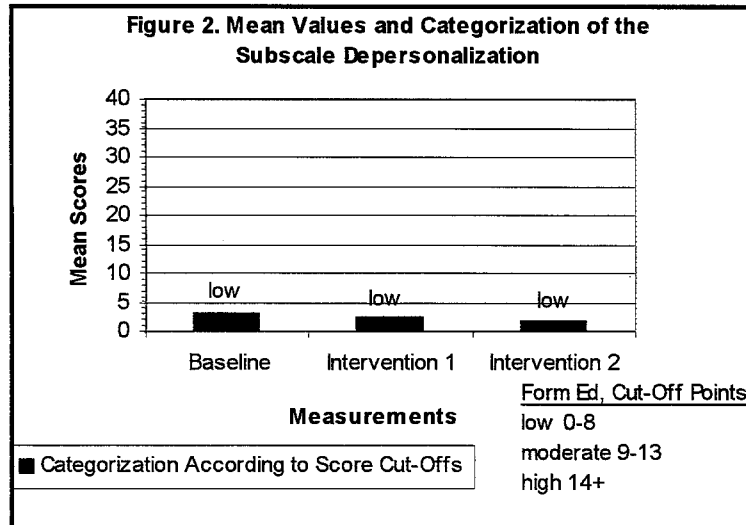
The baseline scores for feelings of Personal Accomplishment were on a moderate level (M=34.86, SD=8.61). Levels of Personal Accomplishment continue to be moderate after the first intervention (M=35.57, SD=9.33) showing a slight decrease with a mean difference of -.71 (p<.82) in comparison to the baseline scores. After the second intervention, feelings of Personal Accomplishment decrease to a low level (M=37.43, SD=7.91) with a mean difference of –1.86 (p<.37) in comparison to the first intervention. All scores yielding no statistical significance. Results presented in graphic form in Figure 3. Mean scores and standard deviations are presented in Table 1.

Figure 3. Mean Values and Categorization of the Subscale Personal Accomplishment
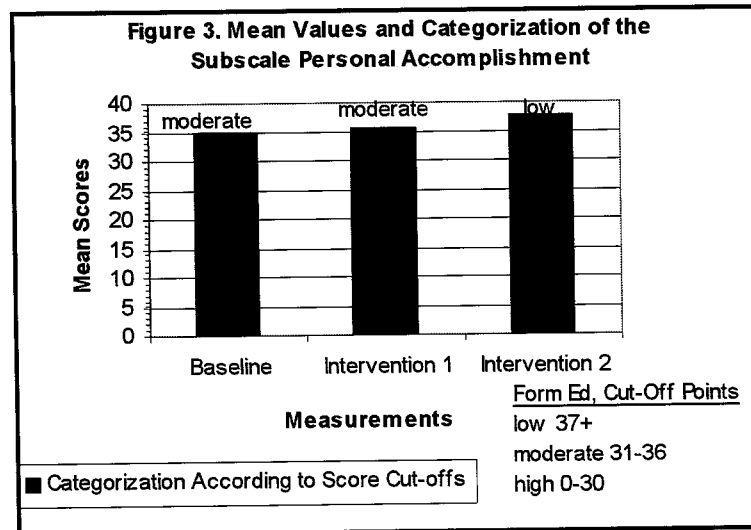
Note. Personal Accomplishment is scored in opposite direction from Emotional Exhaustion and Depersonalization.

Table 1. Mean Levels and Standard Deviations for Baseline, Intervention 1, and Intervention 2, under the Three Subscales Emotional Exhaustion, Depersonalization, and Personal Accomplishment

| Measurement	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	M	SD	M	SD	M	SD
Baseline	22.86	7.71	3.00	4.62	34.86	8.61
Intervention 1	16.57	8.72	2.43	2.88	35.57	9.33
Intervention 2	16.00	8.69	1.71	2.49	37.43	7.91

According to the mean scores, overall feelings of emotional exhaustion and depersonalization decreased. Feelings of personal accomplishment also decreased, which is considered a negative impact due to the fact that this subscale is scored in reverse in comparison to the other two subscales.

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Scores on the Maslach Burnout Inventory for each of the individual teachers in this study are presented in Table 2. Frequency distribution for the baseline of the sub-scale of Emotional Exhaustion shows two of the subjects felt low levels, three felt moderate levels, and two felt high levels of Emotional Exhaustion. After the first intervention, three felt low levels of Emotional Exhaustion, four felt moderate levels, and none of the subjects experienced high levels. After the second intervention, three felt low levels, three felt moderate levels, and one felt a high level of Emotional Exhaustion. Frequency distributions for Emotional Exhaustion are presented in graphic form in Figure 4.

Figure 4. Frequency Distribution For The Subscale Emotional Exhaustion
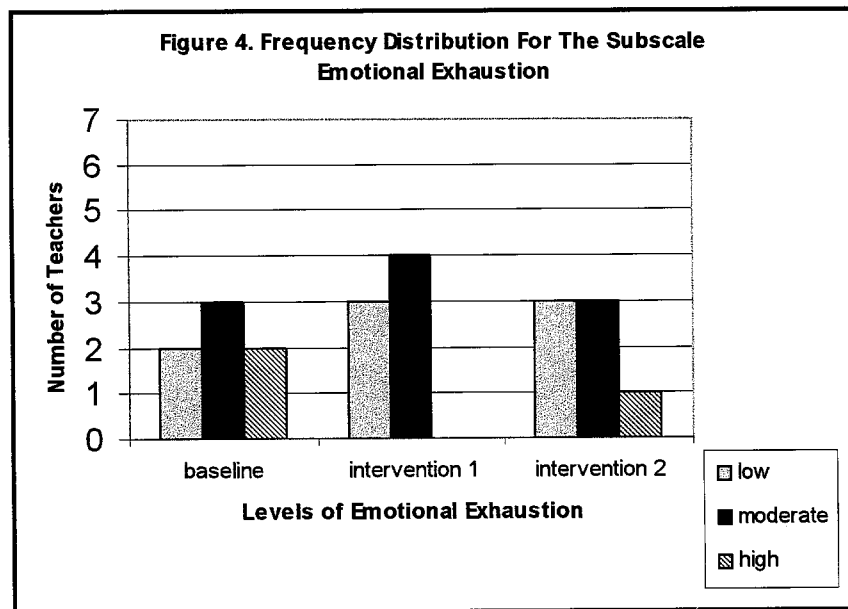
Six subjects scored low levels of Depersonalization, and one moderate level, after the baseline measurement. All seven scored low amounts of Depersonalization after the first intervention. The results remain the same after

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the second intervention.   Frequency distribution for Depersonalization is

presented in graphic form in Figure 5.

Figure 5. Frequency Distribution For The Subscale Depersonalization
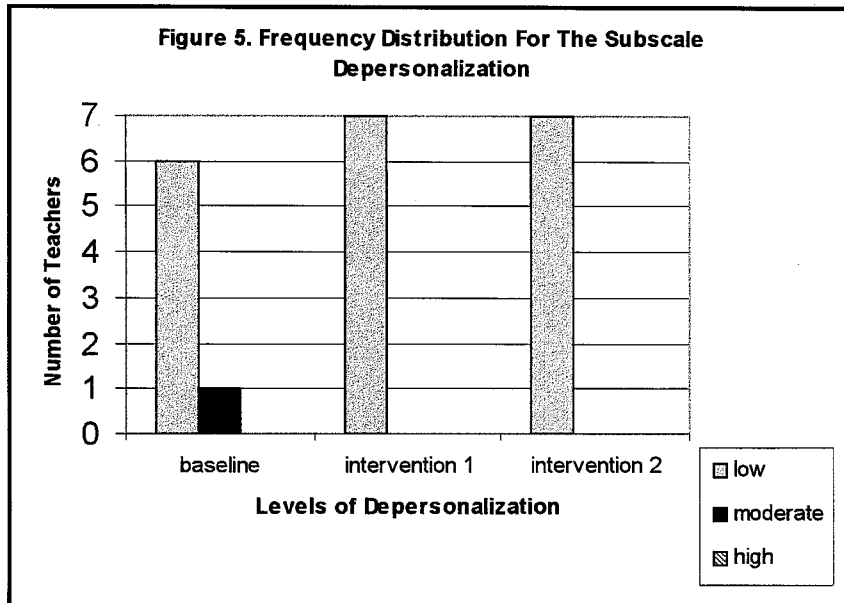
After the baseline measurement, three teachers were found to have low

level feelings of Personal Accomplishment, two showed moderate levels, and two

showed high levels. Low level feelings of Personal Accomplishment increased to

four teachers, moderate remains the same at two teachers, and only one teacher

retains a high level of Personal Accomplishment. After the second intervention

frequency distribution remains the same as the first intervention. Results are

graphically presented in graphic form in Figure 6. Frequency of categorization is

presented in Table 2.

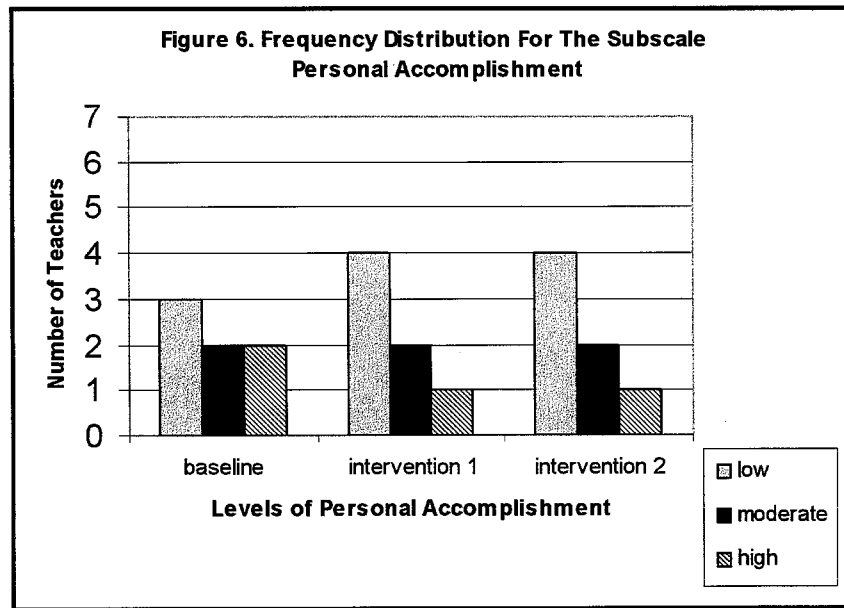Figure 6. Frequency Distribution For The Subscale Personal Accomplishment

Table 2. Frequency Distribution of Categories for the Baseline, Intervention 1, and Intervention 2, under the Subscales Emotional Exhaustion, Depersonalization, and Personal Accomplishment

| | Number of Teachers | | | | | | | | |
| | Baseline | | | Intervention 1 | | | Intervention 2 | | |
Category	EE	DP	PA	EE	DP	PA	EE	DP	PA
Low	2	6	3	3	7	4	3	7	4
Moderate	3	1	2	4	0	2	3	0	2
High	2	0	2	0	0	1	1	0	1

Note. EE=Emotional Exhaustion, DP=Depersonalization, PA=Personal Accomplishment

In order to identify and count the number of teachers whose patterns of scores are the same, increases and decreases from the baseline to the first intervention and from the first intervention to the second intervention were identified for each teacher. The counts yielded, under the subscale of Emotional Exhaustion, three teachers whose scores decreased from the baseline to the first intervention and again after the second intervention. Individual scores and their

corresponding categorizations for the subscales Emotional Exhaustion, Depersonalization, and Personal Accomplishment are presented in Tables 3, 4, and 5, respectively.

Teacher One had a baseline score of 33 (high level) which decreased to a moderate level score of 22 after the first intervention and a lower moderate level score of 20 after the second intervention.

Teacher Five had a baseline score 24 (moderate level) which decreased to a slightly lower moderate level score of 23 after the first intervention, and an even lower score of 18 (moderate level) after the second intervention.
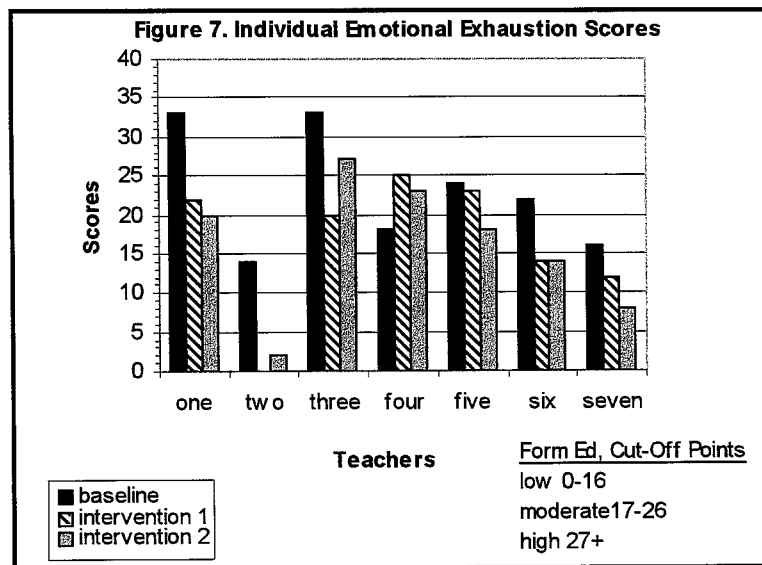
Teacher Seven showed a low level baseline score of 16 which decreased within the low level to 12 after the first intervention, and then to 8 after the second intervention.
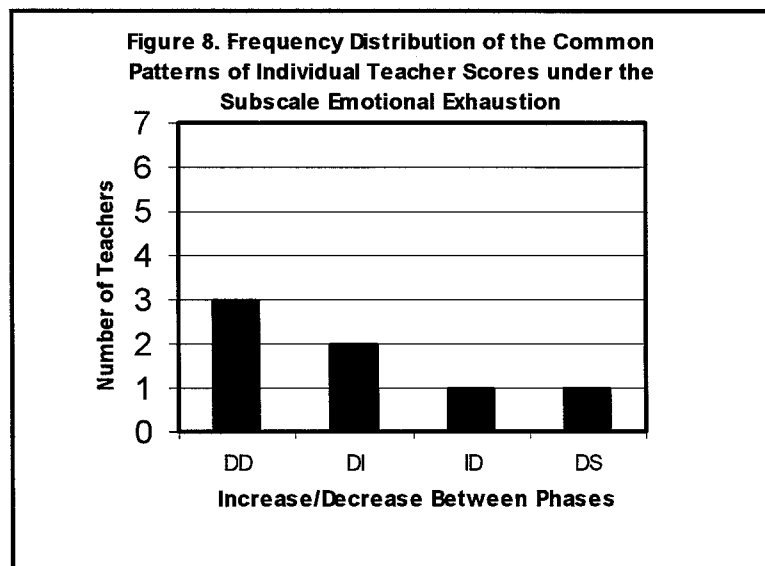
Two Teachers, under the subscale of Emotional Exhaustion had a decrease in their scores after the first intervention, but then increased after the second intervention. Teacher Two who had a low level baseline score of 14, which decreased to 0 (low level) after the first intervention and then slightly increased after the second intervention to a score of 2 (low level). Teacher Three showed a high level score of 33 on the baseline, decreased to a score of 20 (moderate level) after the first intervention and returned to a high level score of 27 after the second intervention.

One teacher displayed an increase then a decrease in scores of Emotional Exhaustion. Teacher Four showed scores that increased from a moderate level baseline score of 18, to a higher moderate level score of 25 after

the first intervention, but decreased to a lower moderate level score of 23 after the second intervention.

One teacher, Teacher Six, showed a decrease from the moderate level baseline score of 22 to a low level score of 14 after the first intervention, and remained the same after the second intervention. Individual scores and their categories under the subscale of Emotional Exhaustion are presented in graphic form in Figure 7, and the frequency of common score patterns are presented in in graphic form inFigure 8. Individual scores and categories are presented in Table 3.

Figure 7. Individual Emotional Exhaustion Scores

Figure 8. Frequency Distribution of the Common Patterns of Individual Teacher Scores under the Subscale Emotional Exhaustion

Note. DD= A decrease in scores from the baseline to intervention 1 scores and a decrease in scores from intervention 1 to intervention 2

DI= A decrease from the baseline scores to intervention 1 and an increase in scores from intervention 1 to intervention 2

ID= An increase in scores from the baseline to intervention 1 and a decrease in scores from intervention 1 to intervention 2

DS= A decrease in scores from the baseline to intervention 1 and scores remained the same to intervention 2

Table 3. **Individual Score and Category Comparisons for the Baseline, Intervention 1, and Intervention 2, under the Subscale Emotional Exhaustion**

	Emotional Exhaustion					
	Scores			Categorization		
Teacher	Baseline	Intervention 1	Intervention 2	Baseline	Intervention 1	Intervention 2
One	33	22	20	high	moderate	moderate
Two	14	0	2	low	low	low
Three	33	20	27	high	moderate	high
Four	18	25	23	moderate	moderate	moderate
Five	24	23	18	moderate	moderate	moderate
Six	22	14	14	moderate	low	low
Seven	16	12	8	low	low	low

When comparing individual scores and categories to reveal patterns of increases and decreases under the subscale Depersonalization, two teachers displayed an increase after the first intervention, and a decrease after the second intervention. Teacher Seven's baseline score was 3 (low level), which increased to 4 (low level) and then decreased down to 2 (low level) after the first and second intervention respectively.

Teacher Three had a low level baseline score of 0, which increased within the low level to 3 after the first intervention, and then returned to 0 after the second intervention.
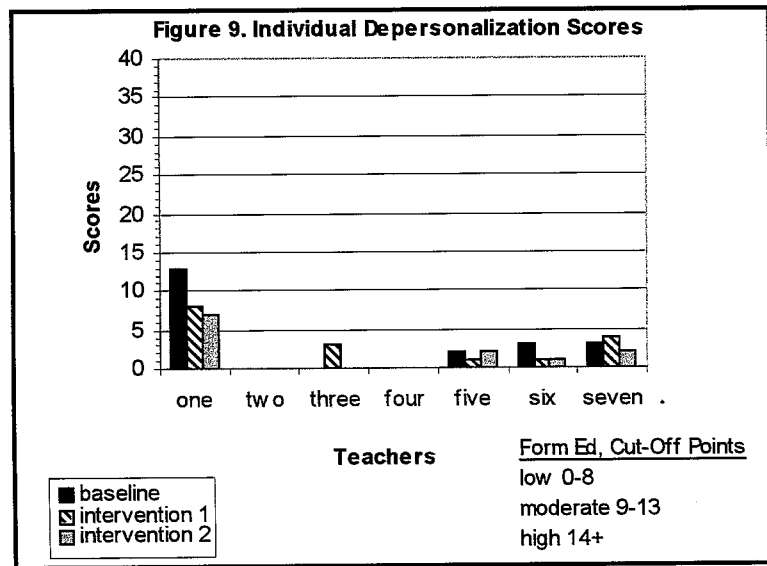
One teacher, Teacher One, displayed a decrease from baseline over both interventions. The baseline score was 13 (moderate level) which decreased to a low-level score of 8 after the first intervention, and decreased to 7 after the second intervention.
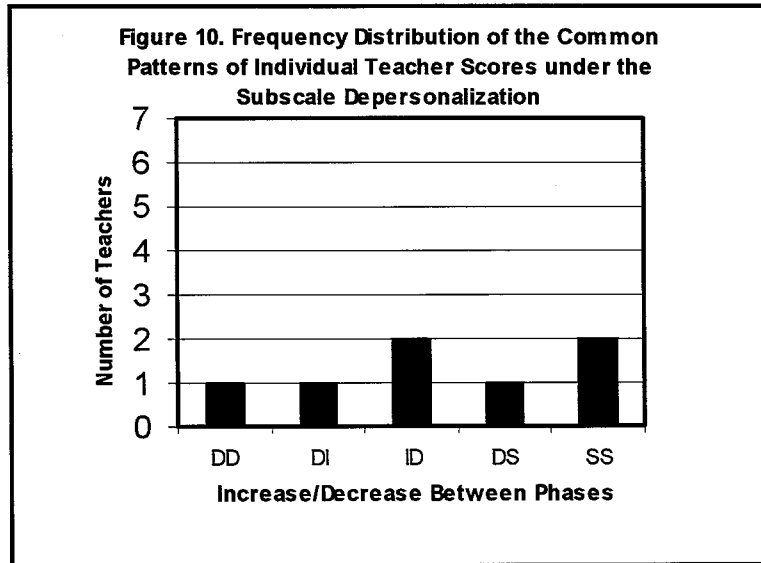
Two teachers showed no change in their Depersonalization scores. Both teachers, Two and Four, showed low level scores of 0 across the baseline, Intervention One and Intervention Two.

One teacher, Teacher Five, revealed a decrease from the base line score of 2 (low level), to the first intervention score of 1 (low level), and then an increase back to 2 (low level), after the second intervention.

One teacher showed a decrease from the base line to the first intervention and then remained the same after the second intervention. Teacher Six had a low level score of 3 at base line, which decreased within the low level category to 1 and then remained at 1 after the second intervention.

Individual scores are presented in graphic form in Figure 9 and frequency of common score patterns are presented in graphic form in Figure 10. Individual scores and categories are presented in Table 4.

Figure 9. Individual Depersonalization Scores

Teachers

Form Ed, Cut-Off Points
low 0-8
moderate 9-13
high 14+

baseline
intervention 1
intervention 2

Figure 10. Frequency Distribution of the Common Patterns of Individual Teacher Scores under the Subscale Depersonalization

Note. DD= A decrease in scores from the baseline to intervention 1 scores
and a decrease in scores from intervention 1 to intervention 2

DI= A decrease from the baseline scores to intervention 1 and an
increase in scores from intervention 1 to intervention 2

ID= An increase in scores from the baseline to intervention 1 and a
decrease in scores from intervention 1 to intervention 2

DS= A decrease in scores from the baseline to intervention 1 and
scores remained the same to intervention 2

SS= Scores remained the same across baseline and both interventions

Table 4. Individual Score and Category Comparisons for the Baseline, Intervention 1, and Intervention 2, under the Subscale Depersonalization

Teacher	Depersonalization					
	Scores			Categorization		
	Baseline	Intervention 1	Intervention 2	Baseline	Intervention 1	Intervention 2
One	13	8	7	moderate	low	low
Two	0	0	0	low	low	low
Three	0	3	0	low	low	low
Four	0	0	0	low	low	low
Five	2	1	2	low	low	low
Six	3	1	1	low	low	low
Seven	3	4	2	low	low	low

When looking at increases and decreases within categories or between categories for individual scores under the subscale Personal Accomplishment, it must be noted that scoring and categorization are opposite of Emotional Exhaustion and Depersonalization. When Personal Accomplishment subscale scores increase, feelings of personal accomplishment actually decrease. Results will be discussed in terms of individual scores.
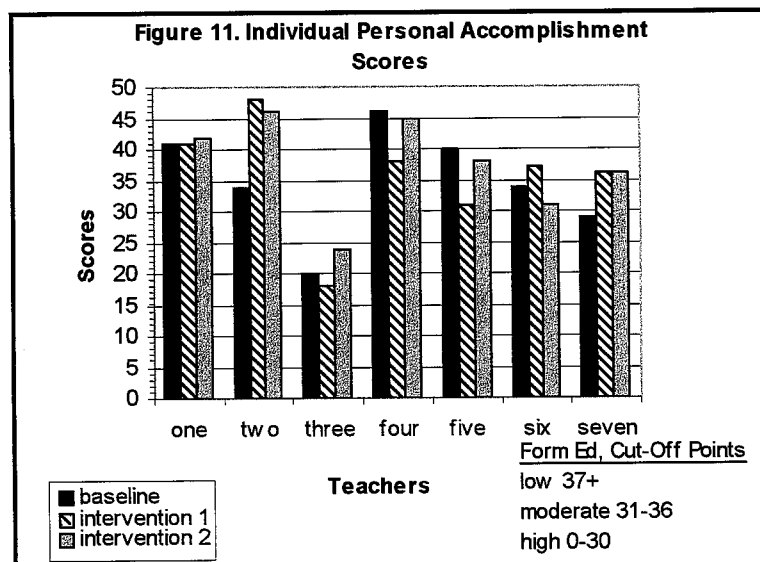
Three teachers displayed a decreased in scores from the base line to intervention 1 and then an increase from the first intervention to the second intervention. Teacher Three has a base line score of 20 (high level) which decreased to 18 (high level) after the first intervention and then increased to 24 (high level) after the second intervention. Teacher Four showed a base line score of 46 (low level) which decreased after the first intervention to 38 (low Level) and increased to 45 (low level) after the second intervention. Teacher Five also showed the same pattern of Depersonalization scores with a base line score of 40 (low level) with a decrease to a score of 31 (moderate level) after the first intervention and then an increase to a score to 38 (low level) after the second intervention.
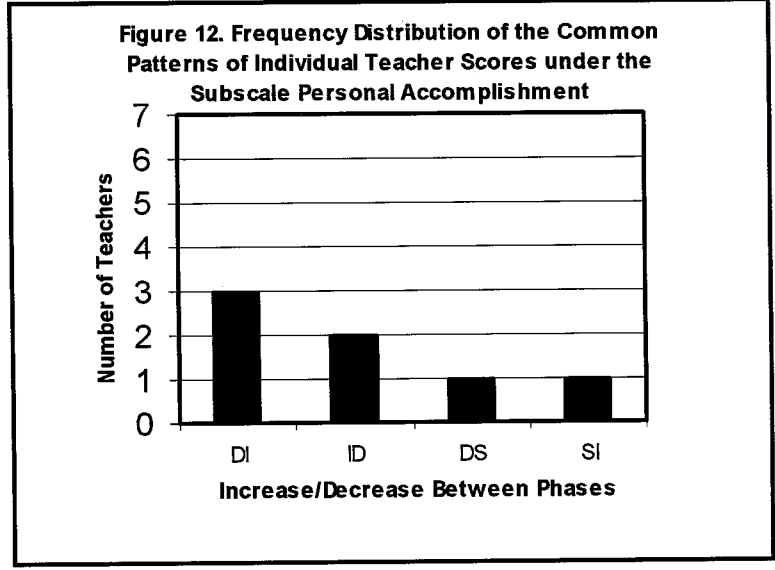
Two teachers showed patterns of an increase and then a decrease of scores under the subscale Depersonalization. Teacher Two had a baseline score of 34 (moderate level) which increased to 48 (low level) after the first intervention and then decreased after the second intervention to a score of 46 (low level). Teacher Six showed a score at baseline of 34 (moderate level) which

increased after the first intervention to 37 (low level) and then decreased to 31 (moderate level) after the second intervention.

One teacher showed the same score from the baseline to the first intervention, and then an increase after the second intervention. Teacher One followed this pattern with a baseline score of 41 (low level) which remained the same after the first intervention, then increased to 42 (low level) after the second intervention.

One teacher showed a decrease after the first intervention, and then scores remained the same after the second intervention. Teacher Seven revealed this pattern with a baseline score of 29 (high level) which increased to 36 (moderate level) after the first intervention, and remained the same after the second intervention. Individual scores are presented in graphic form in Figure 11 and the frequency counts of common score patterns are presented in graphic form in Figure 12. Individual scores and categories are presented in Table 5.

Figure 11. Individual Personal Accomplishment Scores

Teachers

baseline
intervention 1
intervention 2

Form Ed, Cut-Off Points
low 37+
moderate 31-36
high 0-30

Figure 12. Frequency Distribution of the Common Patterns of Individual Teacher Scores under the Subscale Personal Accomplishment

Note. DD=A decrease in scores from the baseline to intervention 1 scores and a decrease in scores from intervention 1 to intervention 2
DI= A decrease from the baseline scores to intervention 1 and an increase in scores from intervention 1 to intervention 2
ID= An increase in scores from the baseline to intervention 1 and a decrease in scores from intervention 1 to intervention 2
DS= A decrease in scores from the baseline to intervention 1 and scores remained the same to intervention 2

Table 5.   Individual Score and Category Comparisons for the Baseline, Intervention 1, and Intervention 2, under the Subscale Personal Accomplishment

	Personal Accomplishment					
	Scores			Categorization		
Teacher	Baseline	Intervention 1	Intervention 2	Baseline	Intervention 1	Intervention 2
One	41	41	42	low	low	low
Two	34	48	46	moderate	low	low
Three	20	18	24	high	high	high
Four	46	38	45	low	low	low
Five	40	31	38	low	moderate	low
Six	34	37	31	moderate	low	moderate
Seven	29	36	36	high	moderate	moderate

After finding and counting the teachers who have common patterns of increases and decreases of experienced burnout under all three sub-scales within and between categories, there was not enough common demographic information to link individuals to any one criteria (demographically).

Chapter Five

Discussion

     This study researched the effects of two interventions, rotating schedules and weekly one hour tutoring groups, on teachers' feelings regarding bedside tutoring low-response level students. Data was collected using the Maslach Burnout Inventory, Third Edition. It was hypothesized that teachers' feelings of experienced burnout would improve using rotating half-hour intervals of instruction and weekly one hour tutoring groups over an eight week period.

     Overall, the results indicated that feelings of emotional exhaustion and depersonalization decreased among teachers. This finding shows that the two interventions, rotating half-hour instruction intervals and weekly one hour tutoring groups, were successful under the two subscales of Emotional Exhaustion abd Depersonalization. Under the subscale Personal Accomplishment, however, feelings of personal accomplishment also decreased, after both Interventions One and Two.

     It appears that the interventions implemented were successful under the subscales of Emotional Exhaustion and Depersonalization because of the variety of students, shortened instruction periods, support and socialization with other teachers. We are reminded of studies such as Starnaman and Miller (1992), which finds that teachers who have limited contact with others is a cause of burnout. Van Horn, Schaufeli, and Enzmann (1999) add by explaining that a lack of positive feedback from students leads to a sense of uselessness in teachers. Farber (2000) concurs that monotonous, under-stimulating work conditions fail to

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provide the teacher with sufficient rewards. Intervention One, rotating half-hour schedules, reinforces the previously stated research through relieved monotony and isolation by the shortened amount of time with each student, increased variety, and easy completion of a planned activity. Intervention Two, weekly tutoring groups, assisted with decreased feelings of emotional exhaustion and depersonalization due to the relief from lack of positive feedback and interaction with other teachers, feelings of resentment and boredom, and difficulties with filling time and activity planning.

A problem revealed by the study is the decreased feeling of personal accomplishment among teachers. Fulfillment in teaching is important to teachers' feelings. Billingsley and Cross (1991), state that a teacher's perception of ineffectiveness leads to non-rewarding experiences and a perceived lack of success. The interventions used were obviously not completely instrumental in making the teacher feel accomplished and successful. One probable explanation for the lessened amount of personal accomplishment may be due to the fact that all of the activities were already planned, giving the teacher no sense of ownership, creativity, or originality. In further studies, leaving the scheduled activities for the teachers to plan should be added.

The students involved in the rotating half-hour schedules were new to most of the teachers studied. Previously, each teacher worked with a student five times a week. A half-hour time slot, two times per week over an eight week period does not give the teacher ample time to really learn about the subtle responses, if any, the student will give during instruction time. This most likely

would lead to decreased feelings of personal accomplishment. Another difficulty with shortened instructional periods is only one activity is completed. Even though there is success with activity completion, this activity was repeated three more times with three different students. This repetitive nature may make the task monotonous, leaving the teacher unfulfilled. To solve this problem, along with the added planning by the teachers, the rotation times could be increased to one hour, giving the teacher more time to learn about the student and more time to add varied activities. During these interventions, it would also be imperative for the teachers to communicate with each other to assist with planning and to learn about each other's students.

Results from this study also revealed a lack of common demographic characteristics among the teachers to justify reasons for similar patterns in experienced burnout. Occasionally, it was found that one or two teachers might have had age or certification in common. Generally, however, not much else could be found to demonstrate that age, teaching experience, certification, or length of tutoring hours were linked to increases or decreases in scores after each intervention. This inability to link demographic information to the causes of experienced burnout could be due to the small sample of teachers studied.

These findings reinforce many studies, such as, Berg (1994), which states that most demographic variables have inconsistent relationships to burnout in education. Capel (1992) agrees that stress and burnout are not related to age or gender, but are related to the individual, the environment, and psychological factors. Boyle (1995) adds that burnout is determined to a large extent, by an

individual's perceptions and interpretations of stressors and their coping mechanisms. Guglielmi and Tatrow (1998) state that stress is perceived by the individual. Seidman and Zager (1986/87) conclude that burnout is caused by an individuals inability to cope positively, which can be linked with Friedman and Farber's (1992) theory that stress and burnout are more likely caused by lack of self-esteem. These studies affirm that burnout levels vary according to how an individual prevents, reacts, and copes with stress.

There must be varied and effective approaches to dealing with stress and burnout. Brownell (1997), explains that there must be active strategies to reduce sources of stress. Intervention One, rotating half-hour tutoring intervals, and Intervention Two, weekly one hour tutoring groups, address the environmental sources of stress, but do not delve into the personality changes needed for people to experience reduced burnout. These interventions are only the beginning to reducing stress and burnout for teachers who bedside tutor.

One factor, which may improve teacher feelings beyond the studied interventions, is administrative support. Brownell (1997) states that the best prevention is efforts by administrators to create a more productive, caring and clearly defined work environment. Fimian (1986) agrees that support and recognition make an individual feel valued. Possibly, stress workshops, one on one discussions with administrators about program planning and challenges, and acknowledgement for successful teaching can be added to the interventions. Added administrative support would deal with some of the individual, internal

factors that cause people to react and cope with stress differently, as well as increase personal accomplishment due to acknowledgement.

Administrative support should be an intervention added to the research of this study. Peer support groups and self-monitoring of daily stress levels could also be instrumental to further research in relieving burnout within this challenging teaching environment. This study needs to have more subjects, including males, to research. By researching more subjects, maybe personality factors and possibly demographic factors would be discovered that link to experienced burnout. A measuring instrument, which is more specific to teachers who bedside tutor, could hopefully also be developed and implemented.

In conclusion, this study researched if feelings of stress and burnout experienced by seven teachers, who bedside tutor medically fragile students with low response levels, are improved through two interventions, rotating half-hour tutoring intervals of instruction and weekly one hour tutoring groups, over an eight week period.. Data was gathered using the Maslach Burnout Inventory, Third Edition. Measurements from this assessment were taken after each intervention. Due to the decreased instruction time, variety of students, and social support , levels of emotional exhaustion and depersonalization decreased after both interventions. One unexpected effect was the decrease in feelings of personal accomplishment also after both interventions. This may have been caused by lack of ownership of lesson planning, less activities completed during instruction time, and little knowledge about new students. Another result of this study revealed that none of the teachers' demographic information could be

linked with patterns in increases and decreases in experienced burnout. This could be due to the limited amount of research subjects. However, this result does reinforce previous research that suggests that how stress and burnout are prevented, experienced, and coped with are based on the individual not demographic information. This leads to implications for further study, which should include more personality based research on stress and burnout in teachers of medically fragile students with low response levels and increased number of research subjects. Further Interventions to implement could include teacher support groups and increased administrative support and reinforcement.

This research is one of the rare studies that looks at teaching in the field of bedside tutoring medically fragile students with low-response levels. It is important to note that this field is continually growing and more research is needed to assist, educate, and acknowledge the unique and gifted people that work within it.

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