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ABSTRACT

This report describes a program for heightening awareness of stress and reducing stress levels while improving learning. The targeted population comprised seventh and ninth grade students in middle schools and high schools located in affluent suburban communities of a large Midwest city. The problem of moderate to high levels of stress was documented with teacher and student surveys, a stress level inventory, stress logs, and anecdotal records. Analysis of probable cause indicates a high level of stress among middle and high school students. This high level adversely affects various situations, including academic and social. Review of the research indicates that students are not introduced to coping skills in the school setting. A review of the solution strategies suggested by other researchers, combined with an analysis of the problem setting, resulted in the development of parent newsletters, teacher-led relaxation exercises, and implementation of a time and stress management program. The program includes lessons in role playing and problem solving, worksheets, and stress logs. Postintervention data indicates that students internalize coping techniques for stress. More research is necessary to determine whether improved academic achievement is a result of the intervention. Appendix A is Relaxation Techniques; Appendix B is Role-Play Activities; Appendix C is Goal-Setting Worksheet; Appendix D is Time Management Worksheet; Appendix E is Signs of Stress Worksheet; Appendix F is Stress Logs; Appendix G is Students Pre- and Post- Surveys; Appendix H is Teacher Survey; Appendix I is Stress Level Inventory; and Appendix J is Parent Newsletter. (Contains 2 figures, 7 tables, and 18 references.) (Author/MKA)

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A STUDY OF RELAXATION TECHNIQUES AND COPING SKILLS WITH MODERATELY TO HIGHLY STRESSED MIDDLE AND HIGH SCHOOL STUDENTS

Alison Credit Mary Garcia

An Action Research Project Submitted to the Graduate Faculty of the School of Education in Partial Fulfillment of the Requirements for the Degree of Master of Arts in Teaching and Leadership

Saint Xavier University & Skylight Professional Development

Field-Based Masters Program

Chicago, Illinois

May, 1999

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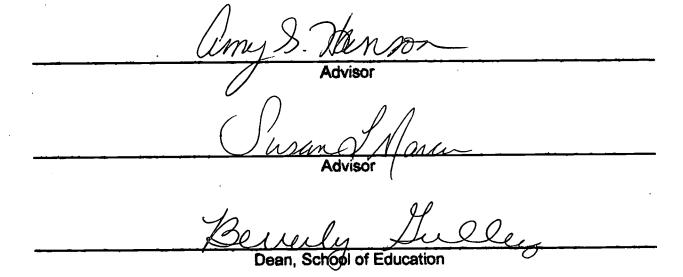
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DEDICATION

We dedicate this project to our families, especially our children. May they experience life to the fullest with good health, love, and happiness.



ABSTRACT

This report describes a program for heightening awareness of stress and reducing stress levels while improving learning. The targeted population consisted of seventh and ninth grade students in corresponding middle and high schools. The schools were located in affluent suburban communities of a large city in the Midwest. The problem of moderate to high levels of stress was documented with teacher and student surveys, a stress level inventory, a stress log and anecdotal records.

Analysis of probable cause indicated that there was a high level of stress among middle and high school students. This high level adversely affected various situations, including academic and social. Review of the research indicated that students were not introduced to coping skills in the school setting.

A review of the solution strategies suggested by other researchers, combined with an analysis of the problem setting, resulted in the development of parent newsletters, teacher-led relaxation exercises, and implementation of a time and stress management program. The program included lessons in role-playing and problem-solving, worksheets, and stress logs.

Post intervention data indicated that the students internalized coping techniques for stress. More research is necessary to determine whether improved academic achievement is a result of the intervention.



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CHAPTER 1

PROBLEM STATEMENT AND CONTEXT

General Statement of the Problem

The students of the targeted seventh and ninth grade classes exhibit moderate to high levels of stress. Evidence for the existence of the problem includes student surveys, teacher surveys, a stress level inventory, and student stress logs.

Immediate Problem Context

The middle school and high school referred to in this study, site A and site B, respectively, are located in affluent suburban communities of a large city in the Midwest. The school population at site A is 416. The school population at site B is 1,245. In Table 1, the racial and ethnic breakdown at each school is noted.

Table 1

Racial/Ethnic Background

	White	Black	Hispanic	Asian	Native Amer.
Site A	78.1%	0.2%	0.0%	21.6%	0.0%
Site B	93.7%	0.4%	1.3%	4.7%	0.0%
State	63.3%	20.6%	12.8%	3.1%	0.1%

At both sites, the make-up of the school is predominantly white. Also at each site, the percentage of low-income students is 0.0%. The attendance at each school is fairly high. The



percentage of students who attend site A everyday is 95.0%, while the percentage at site B is 95.9%. The average class size at site A is 21.7, while at site B it is 21.1 students. Each school exhibits similar characteristics in these areas.

Site A has 85 staff members. Site B has 201 staff members. Various characteristics of the staff at each site can be seen in Table 2. Both schools are similar in the years of teaching experience of their employees, as well as in the pupil to teacher ratio. The only slight difference between the two sites is in the percentage of teachers with a master's degree or above.

Table 2
Teacher/Administrator Characteristics

	Average Teaching Experience	Teachers with Bachelor's Degree	Teachers with Master's & Above	Pupil-Teacher Ratio
Site A	15.5 Yrs.	30.0%	70.0%	15.3:1
Site B	16.8 Yrs.	14.2%	85.8%	15.4:1
State	14.8 Yrs.	54.2%	45.6%	18.5:1

Site A consists of six sixth grade classrooms, seven seventh grade classrooms, and six eighth grade classrooms. Major changes have been implemented in the school during the past seven years in the transformation of the school from a junior high to a middle school. Many teachers are now responsible for teaching two core subjects, and every third person on a teaching team has three core subjects. There are many in the community who are still not comfortable with the idea of teachers teaching outside their major content area. Another major change has been the use of hands-on activities in science, without the support of a textbook. The teacher is responsible for generating units of study which fulfill the curriculum. The school has implemented full inclusion, which has mandated renovations to make the school wheel chair



accessible. This has caused many adjustments on behalf of students and staff. A new wing was added five years ago to the 30 year old structure. The wing includes a new gymnasium, resource center, and six new classrooms. At site A, a typical school day begins at 8:20 AM and ends at 3:30 PM. There are 10 scheduled periods which are 40 minutes in length. All students are required to take five core areas of study and gym daily. They are allowed to choose two elective classes which include allied arts and foreign language. There are numerous extra-curricular activities available to the students. These include sports and extensions of the core areas of study.

Site B consists of 38 classrooms, 12 resource centers for various different subjects, a library, gymnasium, pool, and outdoor track and fields. Currently, there is a five year plan underway for building improvements. In the 97-98 school year, the parking lot has been redesigned, the press box has been remodeled, spectator seating was added for baseball games, and the science lab and drafting/visual arts area were redesigned and renovated. In the four years to follow, some of the major plans for improvement are updating classrooms, expanding the studio theater, renovating the auditorium, creating double classrooms, and renovating student cafeterias. A typical school day at site B begins at 7:30 AM and ends at 3:24 PM. There are nine scheduled periods throughout the day, plus one early bird period. Each class period lasts 42 minutes. Of the entire student body, approximately 85% are involved in some sort of extra curricular activity, which either meets sometime during the school day, or before or after school. Ninety-three of every 100 students are college bound.



The Surrounding Community

The communities of both sites are located in northern suburbs of a large Midwestern city.

They are approximately 30 miles from an international airport and easily accessible from various major inter-states.

Site A is located across the street from a large industrial plant. The village is comprised of subdivisions and is a predominantly white collar community. The average household income is \$107,378 and the average home value is \$305,416. The community has seen it's greatest growth in the Jewish and Asian populations. The community is characterized by active parent involvement through the Parent Teacher Organization, and the School Advisory Council. Many parents also volunteer to assist with lunch time and the sports programs. The school board is also very supportive of the school and its administration.

The population of the community where Site B is located is approximately 17,327 with about 6,000 households. The residential area is mostly made up of subdivisions whose streets are flanked by mature trees. The area of the community encompasses seven square miles and includes a 130 acre public golf course, 21 parks, two pools, playing fields, playgrounds, as well as forest preserves. The median family income is \$95,196 and the average home value is \$250,000. The community is also approximately 60% Jewish, as is seen in the make up of the high school. The community is very supportive of the high school and its administration. Although the school is non-union, the community, staff, and students continue to be very happy and willing to do anything to help the school. The expense per pupil is about \$11,834.

National Context of the Problem

As we move toward the 21st century, the negative effects of stress in school-age children is growing. Muto & Wilk (1993) summarized:



Research shows that stress has become one of the most significant health issues of our culture. Young people are not immune and often voice concern about an increasing build-up of their own daily stresses. Although many of these stresses are typical of adolescents in any generation, many are indicative of rapidly changing lifestyles. (p. 1)

Today, a student's level of functioning is affected by various stresses around them, and this diseased level of functioning is carrying over into the school setting, affecting academic performance among other things. According to Mantzicopoulos (as cited in Helms, 1996) stress is defined as an unfolding, dynamic relationship between the individual and their environment. According to D'Onofrio and Klesse (as cited in Helms, 1996), stress is a physical response which causes real and measurable changes in many bodily functions and is particularly apparent during major life events.

Stress is exhibited among students in various forms, including: (a) increased absences from school (Elkind, 1981); (b) stomach-aches and head-aches, or visits to the nurse (Elkind, 1981); (c) increase in aggressive behavior (Nenortes, 1986); (d) anxiety before tests and major assignments, which is reflected in grades (Elkind, 1981); (e) anxiety centered around extracurricular events (Martirano, 1997). One or some combination of these stressors affect a good percentage of students. Johnson (as cited in Kiselica, Baker, Thomas, & Reedy, 1994) estimated that 10% to 30% of students experience school-related anxiety severe enough to interfere with performance. Evidence from student and teacher surveys, student stress level inventories, student stress logs, as well as from a review of the literature, indicate a number of causes of stress among students.



CHAPTER 2

PROBLEM DOCUMENTATION

Problem Evidence

In order to document the extent of student stress at each site, during the first three weeks, student stress level inventories were taken, student and teacher surveys were analyzed, and student stress logs were recorded. Any data discussed regarding students was taken from a sample of 52 students. The teacher survey was handed out to 60 teachers, of which 37 were returned and used in the data analysis.

Stress Level Inventory

The results of the student stress level inventory indicated that stress is indeed present in students' lives. The inventory asked yes or no questions which indicated either signs of stress or situations which cause stress. A score of zero to five indicated a low level of stress, six to ten indicated a medium level, and 11-15 indicated a high level of stress. Figure 1 shows the percentage of students in each category.

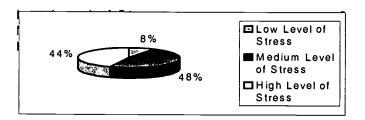
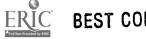


Figure 1. Percentage of students in the Low, Medium, and High Levels of Stress Categories.



It is clear that the majority of the students exhibit medium to high levels of stress. The student survey also indicated that students are feeling stressed.

Student Survey

When asked a general question as to whether the student feels stress in his or her life on a continuum of zero (never) to five (always), the majority of the students fell in the three, four, or five category. This distribution indicates medium to high feelings of stress. This data is represented in Table 3. Not only are students indicating feelings of stress, but teachers also indicated their perceptions of student stress.

Table 3
Student Responses to Stress Questions

	0 never	1	2	3	4	5 always	
Feel Stress In General	2%	6%	29%	38%	19%	6%	
Feel Stress At School	8%	24%	17%	17%	24%	10%	
Feel Stress At Home	13%	31%	29%	15%	7%	7%	

Teacher Survey

The teacher survey asked teachers to give their perceptions of student stress on a continuum of zero to five, with zero indicating "never" and five indicating "always". The data is represented in Table 4. As shown in Table 4, 97% of the teachers indicated that they believe their students have stress in their lives. Seventy-two percent feel that the stress is school related and 73% feel that the student's home related. The student stress logs showed that the students do experience school-related and home-related stress.



Table 4

Teacher Responses to Stress Questions

	0 never	1	2	3	. 4	5 always	
Students Feel Stress In General	0%	0%	3%	30%	54%	14%	
Students Feel Stress At School	6%	8%	14%	47%	22%	3%	
Students Feel Stress At Home	0%	8%	19%	42%	17%	14%	

Student Stress Logs

All students kept stress logs which were collected by the researchers during the research period. Each week, the students were to record an event which caused them to feel stress. They were asked to record as many events which caused them to feel stress during the week; however, they were required to record at least one event per week. Many of the students stated that they felt stress often. Most of these stressful times took place while either at home or at school.

Table 5 breaks the data into two categories: percentage of recordings which were school-related and percentage of recordings which were home-related. Eighteen percent of the time, students had feelings of stress that were home-related, such as fighting with parents or siblings. School-related feelings of stress, such as tests, presentations, and project due dates, were recorded 45% of the time. This data provides more evidence that the problem exists in each of these domains. In order to begin to solve the problem of student stress, one must carefully consider the causes. There are numerous reasons why students today are experiencing high levels of stress.



Table 5

Stress Logs Indicating Home-Related and School-Related Stress

Percentage of Stress Logs With home-related issues	18%	
Percentage of Stress Logs With school-related issues	45%	

Probable Causes

A number of factors contribute to high levels of student stress. One major cause of stress is any type of change. At the particular grade levels studied, children need to cope with many different forms of change. Most children at this age are experiencing many biological and physical changes. Students are also experiencing the change from a grade school schedule to a more departmentalized school setting with increased academic demands. Other factors which contribute to student stress are peer pressure, new-found independence, family matters, parental pressure to achieve, and over-commitment to extra-curricular activities.

<u>Developmental Factors</u>

The first factor which causes stress in a student's life, the student has no control over.

"Puberty is possibly the most influential stressor of the adolescent...puberty causes change, and change is always stressful" (Horton, 1990, p. 10). Puberty causes biological and physical changes to the body. These changes can be traumatic for an adolescent. For example, the changes could be happening at different times from their peers, or they may not understand what is happening to their body. "Adolescence is a period of major change which causes more stress than any other developmental time in a human's life" (Instructional Materials Laboratory, 1992, p. 98). During adolescence, students are dealing with puberty as well as peer relations.



Peer Pressure

At this time in their lives, the relationship with friends becomes very important. "As relationships with peers develop, teens place a great deal of importance on the opinions of their friends. When the prevailing opinion differs from your own or the rules in your household, this can cause severe stress" (Instructional Materials Laboratory, 1992, p. 98).

More research documents the negative impact that peer relations have on an adolescent. Peer groups are of increasing importance to the adolescent and contribute to adolescent stress. The primary influence of peer groups seems to be in the area of acceptance, approval, and mutual support, rather than in any acceptance of peer group standards. (Horton, 1990, p. 11)

According to the survey results, similar findings were noted. Thirty-eight percent of the students surveyed stated peer relations as a cause of stress in their lives. Concerns about being socially accepted, chosen for teams, or making friends were all commonly listed as causes for stress. The student may have to deal with being ridiculed, being unable to make new friends, being approached to engage in alcohol or drug activities, or not fitting in because of lack of "cool" clothes (Martirano, 1997). New social rules further complicate the lives of teenagers. These rules pertain particularly to the opposite sex (Butte, 1993). Along with new peer relations comes a separation from the parents. The student is becoming more independent.

New-Found Independence

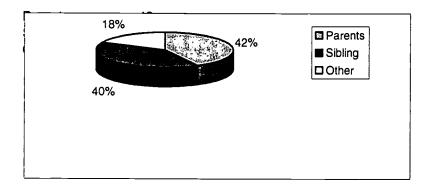
As the students enter adolescence, they begin to "develop closer relationships with their peers. Stress is created as the teen feels more independence from his or her parents, while remaining economically dependent and somewhat protected and supervised by them" (Instructional Materials Laboratory, 1992, p. 98). Many conflicts arise between parents and the



teenager at this time causing yet another stressor in the student's life. The teenager's priorities shift from desiring to please parents to wanting to please friends. This shift often results in family conflicts.

Family Matters

The stress generated within the family can be caused by parents' fighting, parents' divorce, sibling rivalries, arguing family rules, or parental pressure to achieve (Hart, 1990; Price, Jurs, Jurs, Rhonehouse, & Isham, 1985). The student survey results supported all of these causes of stress. A remarkable 100% of the students surveyed reported some sort of family matter as a cause of stress. Forty-two percent listed parents as a cause of stress. Either as parents fighting with each other, parents fighting with other siblings, parents punishing the student surveyed, or parents not being home enough were all reasons for stress in the surveyed students' lives. Forty percent mentioned siblings as a cause of stress at home. Either siblings arguing with parents, sibling rivalry, or annoying behaviors of a younger or older sibling were all listed as causes of stress. Figure 2 shows this data.



<u>Figure 2.</u> Percentage of students listing various family matters as causes of stress.

In today's society, divorce is very common. This change has a major impact on a student's life. As a result of a divorce, many changes can occur. Divorce increases stress significantly. As explained by the Instructional Materials Laboratory (1992):



Divorce creates stress for every member of the family, even when the marriage has been very difficult and the couple have argued openly with each other for some time.

- i. Each member must deal with the loss of the dream, or "ideal family" that he or she wanted.
- ii. After one partner has moved out, the children usually live with one parent and visit the other. Each visit reminds the child of the loss of the parent and the family dream. Frequently, children become angry and depressed after a visit, creating stress in the home.
- iii. When a parent remarries, new stressors occur. Children must adjust to a new parent, and the new spouse must attempt to parent unfamiliar children. Often children feel disloyal to one parent if they begin feeling close to a new partner of the other parent. (p. 99)

The stress resulting from a divorce is immense. It affects all facets of a child's life. It is a lot to cope with during a time when there are so many other factors, such as pressure to achieve, creating stress in a student's life as well.

Parental Pressure to Achieve

According to Nenortes (1986), another factor linked to school stress is parents and their expectations. Unfortunately, many parents set unrealistic goals for their children which are unattainable, thus causing stress for the child. Children today are pressured to achieve, succeed, please parents, and are threatened by the fear of failure. These demands create incredible amounts of stress well before the child is mature enough to deal with the stress (Horton, 1990). The pressure parents place on their children is usually innocent. For many parents these demands



are a way of becoming involved in, and showing concern for their children's lives. Their goal is not to cause stress, however it is inevitable. Parental pressure to achieve begins early in a child's life and can have adverse effects on the teenage years, as cited in Elkind (1981):

Parental pressure to hurry children academically in the early years can also be seen as a downward extension of the parental concern expressed with adolescents. "Ability grouping," for example, has been fought for decades. Parents whose teenagers operate at a slower pace than the norm insist that these young people be expected to do the same work as their faster-moving peers so that they will not fall behind. The failure of some parents to recognize the limits of their child's abilities at the high-school level has its counterpart in the insistence of some parents and their children be taught to read early. In both cases, parents seem to want their children to grow up faster than what seems reasonable for the children in question. (p. 35)

Throughout a child's experience at school, the child has brought school work home.

Typically in the younger grades, parents praise the work either by pinning it up on the refrigerator or rewarding with some new toy. As the child grows however, the school work which is brought home serves a new purpose. The parent uses it to keep track of their child's progress. Often times the feedback is negative and the praise the child is seeking is no longer present. This change in feedback from the parent is another cause of stress in the student's life. According to Johns (as cited in Nenortes, 1986):

When a child brings home a poor school performance report, the parent typically responds in ways that increase the child's already high level of stress. Use of putdowns, the stony silence of disappointment, punitive social restrictions, which cut



the child off from unwinding activities with friends, and withdrawal of parental time spent with the child are all forms of punishment that increase a child stress level and greatly exacerbate his school problems. (p. 7)

According to the student survey, 46% of the students received materialistic rewards from their parents for performing well. Thirty-three percent were punished by their parents for a poor performance in school. Often times students are being punished for reasons beyond their control. Many students indicated that the school structure caused them stress, thus causing a decline in academic performance. Sixty-five percent felt that their academic performance was affected by stress.

School Structure

In the seventh and ninth grades, the students experience a change in the structure of their school day. The atmosphere becomes more stressful because the future placements of the student are based on performance in these grades. In seventh grade, the student's GPA determines their high school placement. In ninth grade, the quest for college begins and the student's achievement is a factor in college acceptance. These increased academic demands and less personal, departmentalized school structures lead to high levels of stress in the lives of students (Hamburg, 1974, as cited in Fahs, 1986). The students have moved from a very personal classroom with one teacher, to a system where there could be as many as eight different teachers. The amount of time spent with each teacher and the time spent on each subject is significantly less. The students are also in a much larger school with many more students. A number of different sources within the school structure contribute to student stress, such as the size of the school, having more than one teacher, needing to get something for class from a locker when it is not "locker time", semester changes, the adjustment to new classes, and placement tests



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(Martirano, 1997). One hundred percent of the sample referred to the school structure in some way as a cause of stress. Specifically, 81% stated homework as a major cause of stress. Other reasons mentioned by 46% of the students were scheduling of major assignments and tests, poor relationships or experiences with teachers, and new or different surroundings to adapt to. Also, another factor which contributes to student stress is, ironically, one which many schools pride themselves on: technology. "Middle graders are now experiencing more stress than that age group experienced in the past because as society is today, there are fewer opportunities for young adolescents to have 'deep interactions' with adults or significant others. Technology, according to Elkind (1986) has increased the number of surface interactions, and decreased deep interactions" (Butte, 1993, p. 41). This idea of surface and deep interactions is also present in another area: extra-curricular activities. Students are involved in so many activities without really investing themselves in the given activities. This over-commitment causes yet more stress. Over-Commitment

Finally, a major factor which causes stress in a student's life is over-commitment to activities. Time was another factor mentioned by the students surveyed. Sixty percent stated that not having enough time to study or do homework, or having too many things to do as a cause of stress. "Time can become a major stress factor if people make demands upon you affecting how you spend your time. A common problem is that people get involved in too many activities and 'run out of time'" (Instructional Materials Laboratory, 1992, p. 101). This stressor is especially evident in seventh grade as students begin to join sports teams, attend dances, fulfill religious obligations, and join clubs. The amount of activities increases with time as the option to accept a part-time job in high school presents itself, and the intensity of previous activities such as sports, clubs, theatre, student government, and social events increases. With all of these choices given



to a student who is trying to please his or her parents and friends, as well as trying to deal with the changes of adolescence, the onset of increased stress is inevitable. Although the stress caused by factors such as puberty, family matters, peer relations, school structure, and over-commitment to activities is inevitable, it can be significantly reduced.



CHAPTER 3

THE SOLUTION STRATEGY

Literature Review

All students will experience stress in their lives. Some stress is positive in that it challenges the individual, while too much stress can have negative effects. However, there are means to deal with the causes of high levels of negative stress in students. Whether it is puberty, family relations, peer relations, school structure, or over-commitment to activities causing stress, there are ways to help students cope with these stressors. The possible causes for high levels of student stress have been discussed, and it has been determined that students are encountering these causes daily. "As we think about preparing our students for the challenges and demands of the next century, we cannot lose sight of their day to day concerns. We have the responsibility to acknowledge and provide them with ways to manage and cope with their stresses" (Martirano, 1997, p. 40).

Developmental Factors

Puberty is a stage in life that all adolescents will go through. This is not a factor that can be removed from the student's life. Teachers can, however, help students deal with these changes in their lives by helping them become more aware of the changes. At the time of puberty, a student may be confused as to their role—are they a child or an adult? The teacher can help the student with this identity crisis through role-playing. Allowing the student to experience



others' points of view in a structured setting will help them with their experiences in real life. For example, students can work in groups to analyze real-life stressful situations. They will use problem-solving skills to derive one or more solution strategies to deal with the situation.

Appendix A illustrates the examples students can analyze. The student who is stressed about the changes happening to them and embarrassed to ask questions about it may have their questions answered in a non-threatening situation (Horton, 1990). The students can also be made aware that they are not alone in dealing with the changes accompanying puberty. In recognizing that others are experiencing the same stressors, a student could also benefit from a peer group program.

The idea of social support as a moderator of stress has received considerable attention.

"A good support system is one of the major factors in reducing the traumatic effects of stress"

(Instructional Materials Laboratory, 1992, p. 104). At both sites, such programs are in place.

They consist of two facilitators and trained "peer helpers" or "peer mentors". These students tutor in the academic areas and mentor students with social difficulties. Members of the student body may be recommended by a teacher or may approach a facilitator individually to seek assistance or receive help from the program. Finally, at a time when the body is experiencing so many changes, it is necessary to take care of the body through various means.

Teachers can teach students the importance of eating well, getting enough sleep, planning time for recreation, doing something physical, and doing relaxation techniques. For example, students can perform relaxation techniques before tests. Teachers can present steps for relaxation and lead students through them. Appendix B illustrates a handout which described these steps.

All of these are actions which can be taken to manage stress (Instructional Materials Laboratory,



1992). Students should be encouraged to take these measures not only at school, but also at home.

Family Matters

It is difficult, if not impossible, for a teacher to intervene in a student's family life.

Nevertheless, there are measures which can be taken to assist the student in dealing with stress caused by family matters. These include developing problem solving skills, using peer groups to discuss problems, or incorporating a unit on family into the curriculum. To start, problem solving skills can be used to conquer any problem whether it is personal, academic, or interpersonal. If a student learns to apply these skills to a stress-related problem, they can greatly reduce their stress level (Horton, 1990). One method of problem-solving involves four steps, as described by Reikes-Ackerly (as cited in Horton, 1990):

- 1. Make sure you know what the problem is.
- 2. Ask yourself if you really care about solving it.
- 3. Think of different things you could do to solve it.
- Choose one thing to do and do it. Look back to see if it really helped.
 (p. 18)

Secondly, peer groups can be a beneficial way to alleviate stress caused by family matters. Students experience a support system of their peers and eventually feel a secure place to discuss any problems they might be having at home. The peer group can help a student with his or her ability to relate to others, thus reducing stress (Instructional Materials Laboratory, 1992).

Other actions which teachers can take to help students deal with family matters involve interaction with parents. Open communication between parents and teacher, a parent education class, or an increased understanding of the demands placed on their child are all ways to help



reduce stress in the student. As cited in Fee (1997), it is recommended that the parents set up a conference with the child's teacher to talk with the teacher and try to determine the source of the child's academic stress. A parent education class might incorporate methods for communicating with their child, help parents communicate more effectively with the school and vice versa, units on family violence and health issues, and methods for coping with marital problems (Butte, 1993). As difficult as it may be for the teacher to make an impact in the student's family life, it can be done with some effort. The teacher can, however, easily make changes within the school structure to help students deal with stress.

School Structure

Although teachers may not be able to make changes to the school system in the ways of building structure, size, or daily schedule, they can make changes in their classroom and with their teaching style to help reduce student stress levels. For example, different curricular approaches can be used such as a stress management program, teaching problem-solving skills, teaching relaxation techniques, teaching a goal-setting process, and teaching organizational skills. Helping students develop study skills and good work habits is an effective therapy for the kind of stress which is foreseeable and unavoidable (Butte, 1993).

Stress-management. It is important that students learn some stress management techniques to handle the stress which is absolutely unavoidable. The middle school and early high school years hold a period of development in which students need help with learning coping skills for dealing with stress. "One of the main coping skills in the management of stress is self-regulation or self-control of physiological aspects of functioning along with the relaxation/arousal continuum" (Matthews, 1988, p. 1). One form of a stress management program basically helps students understand stress. By realizing that stress is experienced by



everyone, and different for everyone, students can focus on recognizing their own personal stressors. Secondly, students need to be encouraged to find out how stress affects them. Thirdly, they need to be able to implement skills for stress reduction. Finally, the teacher needs to lead the student to accept responsibilities for alleviating their stress (Nenortes, 1986).

Another stress management program (Muto & Wilk, 1993) describes four steps to an interactive process for coping with stress:

- 1. Learn to define stress
- 2. Examine some causes of stress in their lives
- 3. Describe the effect of stress on overall health
- 4. Demonstrate productive methods of managing their own stress (p. 2)

Other techniques which could be discussed within a stress management program are analyzing how the problem measures as compared to other problems, putting the problem aside for a while before tackling it, writing the stressor down as well as one's reaction to it, recognizing whether the stress-induced energy is being used in a positive fashion, and developing plans for how to deal with stress in a positive way (www.missouri.edu, 1998) These stress management programs have been shown to be effective in reducing stress and thus improving test performance (Matthews, 1988). In addition to a stress-management program, the teaching of problem-solving skills can assist the student in dealing with stress.

<u>Problem-solving.</u> As stated earlier, problem solving skills can be used in any stressful situation. The teacher may incorporate a "steps to problem solving" lesson early in the school year to use throughout the year on academic problems as well as others. For example, a lesson involving word problems can be introduced using the steps to problem solving. Two examples can be given, one a real life stressful problem, and the other a mathematical word problem from



the textbook. The teacher can take the students through the steps paralleling the two examples. The students will learn that the steps for problem solving can be applied in all situations. In addition to problem solving, an intervention which the teacher may use in the classroom to reduce stress is relaxation technique training.

Relaxation techniques. Matthews (1988) found that relaxation techniques helped decrease anxiety. Nenortes (1986) saw that relaxation training increased accuracy and attending behavior and decreased body movements while engaged in quiet activity. The Instructional Materials Laboratory (1992) recommends imagery, daydreaming for a few minutes, deep breathing exercises, tongue exercises, neck exercises, and forehead massage. Meditation and visualization are other techniques recommended by Columbia Healthcare Corporation (as cited in www.columbia.net.) In addition to these relaxation techniques, goal-setting is another way to help alleviate stress.

Goal-setting. Finally, the teacher may assist the student in dealing with stress by helping the student set goals. A teacher-made template for goal setting would be very helpful to the students attempting this task (Trotter, 1992). It is also important for the teacher to give clear expectations to his or her students. "Realistic goals for the students should be clearly stated. Knowing one's academic status and understanding the expectations reduce stress" (Nenortes, 1986, p. 8). Students can take part in a goal-setting activity in which they learn to identify a goal, list the steps needed to achieve the goal, take the necessary steps, and reward themselves if and when the goal is accomplished. The goal-setting activity is an activity which helps the students organize the process of setting and achieving a goal. Many other activities and teacher practices can be organized in a fashion to help students reduce stress.

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Organizational skills. One of the major causes of high levels of student stress is overcommitment to activities, such as sports, jobs, homework, family obligations, and religious
obligations. The teacher cannot do too much to reduce the amount of activities in the student's
life, but he or she can help the student deal with the notion of "too much to do and too little
time." The teacher can incorporate into his or her lesson plans a daily schedule or assignment
sheet which will allow students to be calmer as a result of a more predictable environment
(Nenortes, 1986). The teacher may also provide worksheets to help students keep track of how
they are using their time (Trotter, 1992). By identifying where the student is wasting the most
time, it will be easier to make a change to use his or her time more effectively. The teacher can
help the student by teaching him how to take larger tasks and break them into manageable steps,
by encouraging the student to establish a "workplace" free of distractions, by helping the student
prioritize the tasks that need to be done, by requiring the student to keep a daily or weekly
calendar, or by providing a semester calendar to show long-term assignments (Gardner & Jewler,
www.missouri.edu).

The first step to solving many of the problems of student stress is to heighten awareness among students, teachers, and parents. An awareness of puberty can be approached through role-plays and peer groups. Family relations can also be discussed in peer groups. A parent newsletter can heighten awareness of stress in students' lives, and open communication between parents and teachers. Teaching problem-solving skills to be used in a variety of situations will help reduce stress as well. Teaching stress management skills, relaxation techniques, a goal-setting process, and organizational skills will also help students reduce stress. The following action plan incorporates some of these solution strategies into lessons for the classroom, or documents for the parents.



Project Objectives and Processes

As a result of implementing various activities into the existing curriculum, during the period of September, 1998 to January, 1999, the targeted seventh and ninth grade students will lower their stress level and increase their test scores, as measured by a stress level inventory, student surveys, and class averages. In order to accomplish the project objective, the following processes are necessary:

- 1. Students' stress levels are identified by a series of informal measures.
- 2. Efforts are made to heighten parental awareness of their child's stress level.
- 3. Teacher-led relaxation exercises are performed before unit tests.
- 4. Time will be set aside from the existing curriculum to implement various activities to aide in relieving stress.

Action Plan for Intervention

The following steps will be taken to implement the intervention:

- I. Assess pre-intervention stress levels.
 - A. Who students and teachers
 - B. What complete survey and stress level inventory
 - C. When the first two weeks of school (August, 1998)
 - D. Why to assess the students' stress levels prior to the intervention in order to have a baseline by which to measure improvement
- II. Parents are made aware of the stressors affecting the adolescent child.
 - A. Who teachers
 - B. What prepare and send home a newsletter to the parents of the targeted students
 - C. When near the end of the semester and final exams (Mid-January)



- D. Why to increase awareness among parents
- III. Relaxation techniques are introduced and performed before unit tests.
 - A. Who teachers and students
 - B. What deep-breathing, muscle relaxation, and visualization
 - C. When for five minutes before each unit test during the research period
 - D. Why to help students lower their stress levels
- IV. Implement various activities to aide in relieving stress including lessons which encompass role-playing, problem solving, worksheets, and student journals.
 - A. Who the teacher will plan the above activities for the students
 - B. What role-playing, problem solving, worksheets, and journal entries

ROLE-PLAYING

- C. When providing four different role-play situations to analyze and discuss in cooperative groups during the first quarter of school.
- D. Why to enable the students to learn from each other and participate as a group to perhaps apply to real-life situations

PROBLEM SOLVING

- C. When during the first week of school a forty-two minute lesson introducing the steps to problem solving, and continuing to emphasize these steps throughout the semester
- D. Why to help students deal with everyday situations and problems which may arise. Also to help students see how the steps of problem solving are applied in their content area as well as in the real world



WORKSHEETS

C. When monthly, during the research period beginning the second week of school:

Time-Management Worksheet, Goal-Setting Worksheet, My Signs of

Stress Worksheet

D. Why to heighten students' awareness of what their stressors are and how they

manage them

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C. When weekly, during the research period students record in their stress log

D. Why to keep track of stress during the week and how student responds to the

stress

Methods of Assessment

The student survey and stress level inventory will be used as pre- and post- evaluative measures to assess any change in student relationships with stress, which include awareness and response to stress. The teacher will read and give feedback on the student stress logs to evaluate progress throughout the intervention. Class averages will be compared to assess whether relaxation techniques before tests improve test scores.



CHAPTER 4

PROJECT RESULTS

Historical Description of the Intervention

The objectives of this project were to lower student stress levels and increase academic achievement. Numerous strategies were used to attempt to achieve these objectives such as relaxation techniques, problem-solving, role-playing, worksheets, and stress logs. Other components of the project included pre- and post- student surveys, a teacher survey, a stress level inventory, and a parent newsletter.

Relaxation Techniques

The teachers introduced relaxation techniques for the students to perform before unit tests. The techniques included deep-breathing, muscle relaxation, and visualization. This was done for approximately five minutes before each unit test during the research period of September, 1998 through January, 1999. The techniques were intended to help students lower their stress levels. A description of these techniques, and an example of the hand-out which was given to the students can be found in Appendix A. In addition to relaxation techniques, problem-solving skills were taught to the students to help them cope with and potentially solve stress-causing problems.



Problem-Solving

During the first week of the research period, a forty-two minute lesson introducing the steps to problem-solving was conducted. The steps were emphasized throughout the research period. The steps were taught in conjunction with a math problem and a real life stressful problem. The steps were to: (a) make sure you know what the problem is, (b) ask yourself if you really care about solving it, (c) think of different things you could do to solve it, (d) choose one thing to do and do it, and (e) look back to see if it really helped. These steps were reinforced through a role-play activity as well.

Role-Playing

Another activity which was done in the classroom during the research period consisted of four different role-play situations to analyze and discuss in cooperative groups. The activity was done to enable the students to practice the problem-solving steps which could be transferred to real life situations. For examples of the four role-plays, see Appendix B. Along with the role-playing activities were various other worksheets activities conducted in the classroom.

Worksheets

Various worksheets were given to the students to help them heighten the awareness of their stress levels and to assist them in ways to deal with the stress. A goal-setting activity, a time-management activity, and a signs of stress activity were all among these worksheets.

Goal-setting. The students were taught how to design a step by step plan to achieve goals. They were given a model to follow, which can be found in Appendix C. The activity helped the student to recognize a goal that was important to them, to incorporate steps to achieving the goal, and to derive a reward for achieving it. In addition to goal-setting, another helpful strategy introduced to the student was time-management.



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Time-management. Students were given a worksheet entitled "Do you waste time?" to help them inventory how they spent their time (see appendix D). They analyzed their data and determined whether they were experiencing problems in the area of time-management. Small group discussions, followed by teacher-led large group discussions then incurred to develop solutions. Being able to identify where the student spent their time was only part of the solution strategy; the student also needed to be able to identify what exactly was causing them stress. The signs of stress activity helped the student accomplish this task.

Signs of stress. Students were given a worksheet which listed various signs of stress (see Appendix E). They were asked to circle the signs which had happened to them in the past month. The purpose of the activity was to help the student recognize that when they were feeling a certain way, they were in fact experiencing stress. If the student could recognize when they were feeling stressed, they could practice coping techniques which they had learned to help reduce the feeling of stress. One of the techniques implemented was the use of stress logs.

Stress Logs

One week into the intervention, the concept of keeping a stress log was introduced. The students were given a sample stress log to discuss with the teachers and use as a model for future logs on a weekly basis during the entire research period. The stress log included a description of the event or events that caused the student to feel stressed, when the event occurred, how the student responded, and how the student might respond in the future. It also served the purpose of helping the student become more aware of his or her stress. An example of the stress log format can be found in Appendix F. In addition to stress logs used for data collection, other items were administered, such as student and teacher surveys.



Student and Teacher Surveys

Student surveys were given pre-intervention and post-intervention to help the students be more aware of their stress, and to document the amount of stress students were feeling and whether students were more effective in dealing with it. Teacher surveys were given pre-intervention to heighten the awareness of student stress among the faculty and to learn of any techniques other teachers use to help their students cope with stress. The student survey and teacher survey can be found in Appendices G and H, respectively. Another data collection device used pre- and post- intervention was a stress level inventory.

Stress Level Inventory

A stress level inventory was taken by the students pre-intervention and post-intervention to evaluate the number of stressors the students had experienced in the past month. It was used to help the student better recognize feelings of stress, and events which might cause stress. The stress level inventory can be found in Appendix I. Finally, a newsletter was distributed to the parents of the targeted student population.

Newsletter

The newsletter was developed by the teacher researchers during the last week of the research period. This newsletter was to provide students and parents information about stress and coping skills during a highly stressful time in the school year. It was given to the students at the end of the grading period. See Appendix J for the newsletter. All of the fore-mentioned materials assisted the researchers in collecting data, implementing an intervention, and analyzing whether the goals of the intervention were met.



Presentation and Analysis of Results

The teacher researchers had two major goals to meet during the intervention. The first goal was to teach strategies to help students manage and reduce stress levels; and the second was to increase academic achievement through the reduction of stress. All of the above mentioned interventions were implemented to successfully meet these goals.

The first goal was to teach strategies to help students manage and reduce stress levels. A stress level inventory was given in the first week of the research period, and given again at the end. The majority of the students are in the medium to high level of stress categories. The percentage of students in the low level of stress category decreased by 5.7%. In the medium category, the percentage decreased by 0.4%. The percentage of students in the high level of stress category increased by 6%. Table 5 compares the results of the pre- and post- stress level inventories. It was not expected by the researchers that stress levels would go down because the amount of stressors were not decreased through the interventions. In addition, the post-intervention inventory was administered at a highly stressful time in the school year. The end of the term, final exams, report cards being sent home were all factors which we feel impacted the results significantly.

In addition, a post student survey was given to see if the students' feelings of stress were lowered. Three categories were compared: (a) feeling stress in general, (b) feeling stress from school, and (c) feeling stress from home. The results can be seen in Table 6. In general, the highest level (5) had an increase; however, the percentages of students indicating a level 3 or 4 decreased. In addition, in the 0 to 1 categories, the percentages increased. This indicated that more students were feeling less stress after the intervention period. Similar trends were found in the area of school-related stress. The home-related stress data also showed that more students



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were feeling less stress after the intervention period. This increase was fairly significant in that the increase was by 9%. Also at the high end of the spectrum, the percentage of students indicating always feeling stress at home decreased by 3%. There was not a significant decrease in the students' feelings of stress over the research period. There are various reasons for this data such as religious obligations during the end of the research period, and the timing of the post survey, which was during a stressful part of the school year.

Table 5

<u>Stress Level Inventories</u>

Level	Pre-test Pre-test	Post-test
Low	8%	2.3%
Medium	48%	47.6%
High	44%	50%

Table 6
Student Responses to Stress Questions

0	1	2	3	4	5	
never				_	always	
					<u> </u>	
2%	6%	29%	38%	19%	6%	
4%	13%	13%	29%	16%	24%	
8%	24%	17%	17%	24%	10%	
9%	22%	14%	17%	21%	18%	
13%	31%	29%	15%	7%	7%	
22%	29%	14%	19%	11%		
	2% 4% 8% 9%	2% 6% 4% 13% 8% 24% 9% 22% 13% 31%	2% 6% 29% 4% 13% 13% 8% 24% 17% 9% 22% 14% 13% 31% 29%	2% 6% 29% 38% 4% 13% 13% 29% 8% 24% 17% 17% 9% 22% 14% 17% 13% 31% 29% 15%	2% 6% 29% 38% 19% 4% 13% 13% 29% 16% 8% 24% 17% 17% 24% 9% 22% 14% 17% 21% 13% 31% 29% 15% 7%	never always 2% 6% 29% 38% 19% 6% 4% 13% 13% 29% 16% 24% 8% 24% 17% 17% 24% 10% 9% 22% 14% 17% 21% 18% 13% 31% 29% 15% 7% 7%



The second goal of the research was difficult to assess. The intervention was to help increase academic achievement by decreasing feeling of stress surrounding testing situations; however, more research needs to be conducted to determine the correlation between the intervention and increased academic achievement. Unit test scores and overall quarter grades of the targeted student population were analyzed. In addition, the scores of a group of students taught by the same teacher-researcher, with the same lesson plans, and same testing materials, without the intervention were looked at. Table 7 illustrates the data.

Table 7

Academic Achievement

Grading Item	Intervention	Non-Intervention	
	Average Grades	Average Grades	
Unit 1 Test	90.24%	81.80%	
Unit 2 Test	93.59%	94.88%	
Unit 3 Test	80.07%	78.80%	
Unit 4 Test	66.99%	73.20%	
Unit 5 Test	80.24%	68.40%	
Unit 6 Test	85.93%	82.12%	
Unit 7 Test	83.31%	77.89%	
1 st Quarter	83.50%	81.80%	
2 nd Quarter	84.20%	81.50%	

The students in the research group had an average on unit test scores 2.25% higher than the non-intervention group. For the overall quarter grades, the average class grade for the research group was 1.7% higher than the non-intervention group during first quarter; and 2.7% higher during the second quarter. In general, the academic achievement of the research group is above average with an 83%; however, it cannot be determined whether their achievement is a result of the intervention. Based on these results, several conclusions and recommendations were made.



Conclusions and Recommendations

The objectives of this project were to lower student stress levels and increase academic achievement. Based on the presentation and analysis of the data on student stress, it was apparent that student stress levels were positively affected by the intervention. The researchers conclude that the portion of intervention involving relaxation techniques before tests was beneficial for their students. More research is necessary to assess whether above average academic achievement was a result of these relaxation techniques.

The researchers recommend that the use of stress logs be introduced in the classroom and opportunities to write in the logs should be given during the school day. The researchers also recommend educating parents through the use of a newsletter, or possibly even more-structured education classes. Finally, the intervention which had the biggest impact on student achievement and was the easiest to implement were the relaxation techniques. It is recommended that the students be taught these techniques early in the school year. The students should be encouraged to use the techniques in all classes, and the faculty should support it by allowing time before giving a test. The researchers also felt that these techniques were an important life skill which could be applied and implemented in any curriculum. Perhaps a stress program implemented within an on-going advisory program would be beneficial to all students in the school. Many of the materials used in this research would lend themselves nicely to such a program. In addition, a prepared booklet, or leaflet on relaxation techniques could be given to the entire staff for self-use, and to promote transfer to the students across all disciplines.

Today, a student's level of functioning is affected by various stresses around them, and this diseased level of functioning is carrying over into the school setting, affecting academic



performance among other things. It is imperative that schools be proactive and implement some type of intervention to assist children in dealing with stress in their lives.



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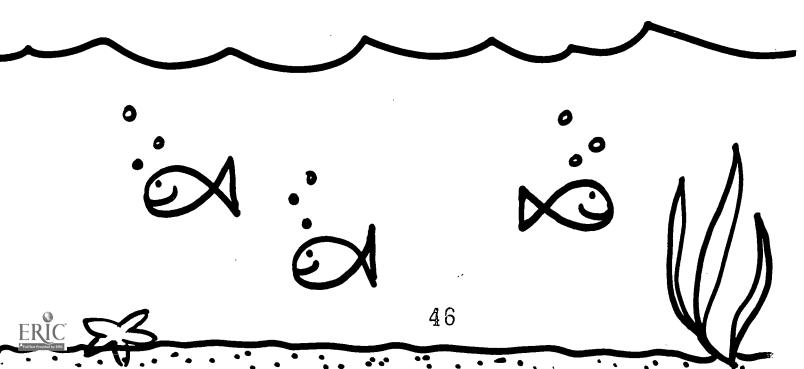


APPENDIX A RELAXATION TECHNIQUES



TIPS for RELIEVING STRESS (especially before a test!)

- 1. Sit in your seat. Close your eyes. Imagine yourself in a pleasant place.
- 2. Take deep breaths. As you breathe in, your abdomen should expand. When you breathe out, your abdomen should return. DO NOT breathe with your chest and shoulders.
- 3. Tighten your back muscles and relax.
- 4. Tighten your "behind" muscles and relax.
- 5. Tighten your calf muscles and relax.
- 6. Tighten your fists and relax. Repeat.
- 7. Tighten your face muscles and relax. Repeat.
- 8. Open your eyes. Continue to breathe deeply. Begin working.



APPENDIX B ROLE-PLAY ACTIVITIES



Situation: Recently, you hear and see your parents fighting constantly. This is really upsetting you and causing you to lose sleep and do poorly in school. What can you do or say to your parents so that they can understand how you feel?

Situation: Since the new year has begun, you have made many new friends. It feels good to be liked by so many and not just your friends from last year. Unfortunately, your best friend has not made as many friends as you. In fact, you have just been invited to a great party with your new friends but your best friend has not and is very hurt. What should you do or say?



Situation: All summer long you have had a great relationship with a friend. In fact, you consider this person your "Best Friend". Now that school has started, this friend is no longer talking to you. You even feel as if you are being ignored.

What is the best way to handle this situation?

Situation: You and your best friend share everything. Unfortunately, your friend feels that this includes cheating. You have math first period and your friend has the same class third period. It is the day of a huge test and your friend asks you to give her the answers to the test.

What is the best way to handle this situation?



APPENDIX C GOAL-SETTING WORKSHEET



Goal Setting

Many of your dreams and ideas about your future can become a reality through goal setting. Goal setting is the planning, step by step, of what you want to accomplish. Below is an example of a goal and the steps to achieving this goal.

Step 1:	State a goal	and	be	specific.
---------	--------------	-----	----	-----------

GOAL: I want to complete all my homework for Spanish class.

Step 2: List steps for achieving the goal:

- a. Write down all assignments in an assignment notebook.
- b. Look at assignment book daily before leaving school and gather needed books and supplies.
- c. Establish a specific homework time and place which is free of distractions.
- d. After completing the daily assignment, mark it complete in the assignment book.

Step 3: Reward yourself.

In the space below, state one of your goals and develop your action steps.

Step 1:	Goal	_
Step 2:	Steps for achieving the goal.	
	a	
	b	
	C	
	d	
	e	
Step 3:	Reward	



What areas are the most problem for you?
Choose two areas which you would like to improve upon. Then, list two ways you are going to improve these areas.
Area 1
Area 2
List one person who can help you improve these areas.
State one or more reasons why it would be beneficial to improve these areas.



APPENDIX D TIME-MANAGEMENT WORKSHEET



Do You Waste Time?

Directions: Using the scale 1 - 4, one being the least problem, rate each of the following. Circle your answer.

	No problem		Big	problem
Setting goals	1	2	3	4
Following a daily schedule	1	2	3	4
Setting priorities	1	2	3	4
Concentrating on a single task	1	2	3	4
Trying to do too much	1	2	3	4
Lack of motivation	1	2	3	4
Unable to cope with change	1	2	3	4
Lack of self-discipline	1	2	3	4
Too many interests	1	2	3	4
Unable to say "No"	1	2	3	4
Making quick decision without thinking it through	1	2	3	4
Not worrying about wasting time	1	2	3	4
Underestimating the time it takes to complete a task	1	2	3	4

Count the number of circles in each column and record it here.

1	2	3	4
		·	



APPENDIX E SIGNS OF STRESS WORKSHEET



My Signs of Stress

Directions: Circle the signs of stress that happen to you.

nightmares

unable to sleep

fast breathing

dizziness

unable to eat

sweating

nervousness

tense muscles

tapping feet

crabbiness

wanting to sleep

lack of concentration

wanting to do something irrational

hot flash

frustration

headache

worried

crying

fast heartbeat

cramps

nail biting

diarrhea

tiredness

arguing

shakiness

hiding from others

unhappiness

nausea

feeling of helplessness



APPENDIX F

STRESS LOGS



Name			
Name			
1 (4111)			

STRESS LOG

In order to help make us aware of stressors in our lives as well as to help us react positively to that stressor, complete the statements below. Record in this log weekly, I will collect it on Mondays. Please follow the example below.

Example.								
Time:	4:30 p.m.							
Day: Thursday Stressor Event: The completion of a paper								
My thoughts:	How well will I do on this paper, what impact will it have on my grade?							
My Behavior:	Went to the kitchen and ate cookies.							
What I would change								
Next time:	Try to begin the project earlier. Ask more questions in class.							
<u>Event #1</u> Time:								
Feeling Response:								
My thoughts:								
Changes I would make:								



Event #2		
Time:		
Day:		
Stressor:		
Feeling Response:		
My thoughts:		
My behavior:		
Changes I would make:		
Event #3		
Time:		
Day:		
Stressor:		
Feeling Response:		
My thoughts:		
My behavior:		
Changes I would make:		
Event #4		
Time:		
Day:		
Stressor:		
Feeling Response:		
My thoughts:		
My behavior:	·	
Changes I would make:		

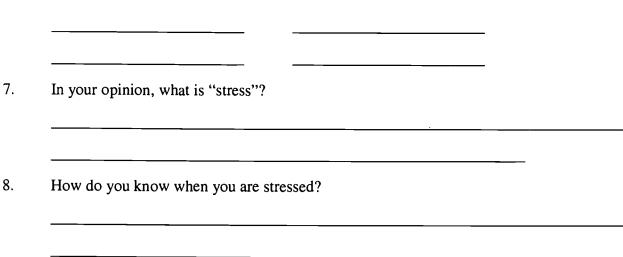


APPENDIX G STUDENT PRE- AND POST- SURVEYS



STUDENT SURVEY

Please answer the following questions by either checking the correct response, or filling in the blank. 1. What is your age? 2. Are you male female 3. Would you consider yourself to be an above average student average student below average student 4. List the number of extra-curricular activities you are involved in (including religious obligations, or part-time work during the school year). Estimate the total amount of time per week you spend on these activities. number of activities number of hours 5. How many members are in your family, including yourself? 6. List any family obligations or household obligations you have (i.e. baby-sitting your little brother everyday after school, or cooking dinner, etc.)





Answ	er the follo	owing st	atements	by circli	ng the i	number, using the given scale:		
$0 = n\epsilon$	ever5	= alway	'S					
9.	I feel stress in my life.							
	C) 1	2	3	4	5		
10.	I feel stress immediately before a test.							
	C	1	2	3	4	5		
11.	I feel str	ess while	e doing m	y school	work a	t school		
	0	1	2	3	4	5		
12.	I feel stre	ess while	e doing m	ıv homev	vork at	home.		
	0		2	3	4	5		
12	The mai	aultu af a				1		
13.	The major		ny stress	comes ir	om scn 4	5		
						•		
14.			ny stress		om hor	me.		
	0	1	2	3	4	5		
15.	How imp	ortant a	re grades	to you?	(0 = no)	et important, 5 = extremely important)		
	0		2	3	4	5		
Answe	er the follo	owing qu	estions a	s clearly	and ho	nestly as possible:		
16.	What are	some o	f the caus	es of stre	ess in y	our life at school?		
				_				



17.	What are some of the	e causes of stress in your life at home?	
		· ·	
18.	What are some meas	ures you take to relieve stress in your life?	
19.	Do you feel more str	ess at home or while at school? Why do you think this is	so?
20.	=	rialistic rewards from your parents or guardians for your ifts, etc.)? Circle answer.	
	YES	NO	
21.	Are you punished by expectations? Circle	your parents or guardians for grades that do not meet the answer.	ir
	YES	NO	
22.	Do you feel that your answer.	school performance is affected by the stress you feel? C	ircle
YES	NO		



POST STUDENT SURVEY

Please answer the following questions by either circling your response or filling in the blank.

Answer the following statements by circling the number; using the given scale:

0 = never......5 = always

1.	I feel stres	s in my l	ife.						
	0	1	2	3	4	5			
2.	I feel stres	s immedi	iately b	efore a t	est.				
	0	1	2	3	4	5			
3.	I feel stress while doing my schoolwork at school								
	0	1	2	3	4	5			
4.	I feel stres	s while d	oing m	y homev	vork at	home.			
	0	1	2	3	4	5			
5.	The major	ity of my	stress	comes fi	om sch	ool.			
	0	1	2	3	4	5			
6.	The major	ity of my	stress	comes fi	om hor	ne.			
	0	1	2	3	4	5			
7.	I use the n	neasures t	aught i	n class t	o reliev	e stress in my	y life.		
	YE				NO	·			
8.	I use the m	neasures t	aught i	n class t	o reliev	e stress befor	e a test.		
	YE	ES			NO				
9.	What are s	ome mea	sures y	ou take	to relie	ve stress in yo	our life?		
				2000					



APPENDIX H TEACHER SURVEY



TEACHER SURVEY

Directions: Please answer the following questions by either marking the correct response or providing a written response.

1.	Are you
	☐ male ☐ female
2.	How many years have you been teaching? ☐ 0-3 ☐ 4-7 ☐ 8 or more
3.	How many years have you been teaching at this school? ☐ 0-3 ☐ 4-7 ☐ 8 or more
4.	What subject(s) do you teach?
5.	In your opinion, what is "stress?
 6.	How do you know when you are stressed?
7.	What do you feel are the causes of stress in your students' lives?



Answer the following statements by	y circling the number,	using the given scale:
------------------------------------	------------------------	------------------------

$\frac{0}{0} = r$	not at all						
8 .	Do you fe		tudents	have st		their lives	?
	0	1	2	3	. 4	5	
•	_			_	,		
9.							y before a test?
	0	1	2	3	4	5	
10.	Do you per	rceive vc	ur etud	ents to	ha stras	ead while	doing schoolwork at school?
10.							doing schoolwork at school?
	0	1	2	3	4	5	
11.	Do you per	ceive st	udents t	o be str	essed o	ver home	work assignments?
	0	1	2	3	4	5	
12.	Do you thin	nk that th	he majo	rity of y	our stu	dents' stre	ess comes from school?
	0	1	2	3	4	5	
	-	_	_		•	J	
12	Do way this	a l e 4 l ea4 41	h			٠. د د	
13.							ss comes from home?
	0	1	2	3	4	5	
14.	How impor	tant are	grades	in your	classro	om?	
	0	1	2	3	4	5	
15.	How impor	tant do (aradas s	seem to	ha ta ti	na studenti	s in your class?
15.							s in your class?
	0	1	2	3	4	5	
16.	Do you feel	that you	ur stude	ents' sch	nool per	formance	is affected by stress?
	0	1	2	3	4	5	
17.	Do you pro	vide anv	activity	v to helr	your s	students re	lieve stress? Circle Answer.
	YES	NO		,	, ,	reacting ic	neve stress: Cheic Allswer.
Ifvec	, what?	110					
11 yes	, what?						
							
18.	Do you talk	with ot	her teac	hers to	arrange	the assign	ning of major projects and
	tests? Circle Answer.						
	YES	NO	•				•
		. 110					





APPENDIX I STRESS LEVEL INVENTORY



WHAT'S YOUR STRESS LEVEL???

Directions: Answer each of the questions below either YES or NO by marking an X on the line

In the last month have you	YES	NO
1. Taken a test?		
2. Had an argument?		
3. Been late to something?		
4. Felt lonely or depressed?		
5. Met someone new?		
6. Competed in a game or contest?		
7. Felt you had too many things to do?		· .
8. Had trouble with school work?		
9. Failed to complete an assignment?		
10. Forgotten to do something?		
11. Been embarrassed?		
12. Used drugs or alcohol?		
13. Kept a secret for someone?		
14. Had a headache?		
15. Helped plan a special event?		



1. Add the number of checks in the YES column and compare your score with the scale below:

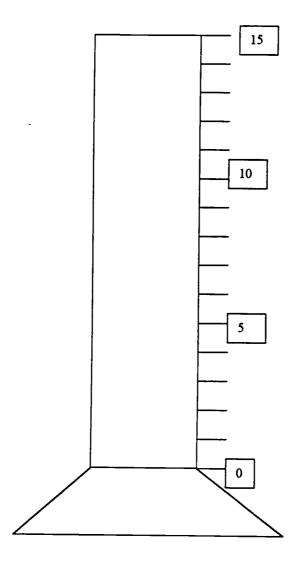
SCALE

0-5 low level of stress

6-10 medium level of stress

11-15 high level of stress

2. Color in the stress meter to indicate your level of stress.





APPENDIX J PARENT NEWSLETTER



FINAL **EXAMS ARE** HERE!!

During this time of the year, it is difficult to stay focused. Remember the relaxation techniques we learned in class and don't be afraid or scared to quietly do them on your own before your exams! GOOD LUCK!!!!

Remember: The harder you work, the luckier you become!



COPING WITH STRESS:

- 1. exercise
- 2. set goals
- 3. prioritize
- 4. pay attention to your body
- 5. practice relaxation techniques
- 6. eat well
- 7. get plenty of rest
- 8. take some time for yourself

Remember the Steps to **Problem-Solving:**

- 1. Make sure you know what the problem is.
- 2. Ask yourself if you really care about solving it.
- 3. Think of different things you could do to solve it.
- 4. Choose one thing to do, and do it. Look back to see if it really helped.

KEEP TRACK OF YOUR STRESS:

Raising your awareness by keeping a log will help you to deal with the stress you're feeling.



DILBERT







BEST COPY AVAILABLE

Share this with your parents..... because they get stressed, too!!!





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with Moderately to Highly Stressed Middle and High School Students

A Study of Relaxation Techniques and Coping

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