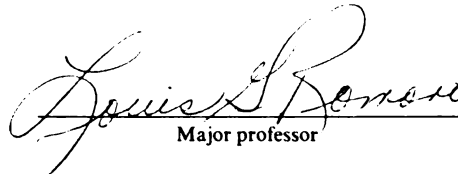This is to certify that the

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THE PERCEPTION OF TEACHERS AND STUDENTS ON STRESS AND BUILDING CLIMATE IN SELECTED MIDDLE SCHOOLS

presented by

JERRY J. KELLEY

has been accepted towards fulfillment
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_____
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THE PERCEPTION OF TEACHERS AND STUDENTS
ON STRESS AND BUILDING CLIMATE
IN SELECTED MIDDLE SCHOOLS

By

Jerry J. Kelley

A DISSERTATION

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ABSTRACT

THE PERCEPTION OF TEACHERS AND STUDENTS ON STRESS AND BUILDING CLIMATE IN SELECTED MIDDLE SCHOOLS

By

Jerry J. Kelley

The purpose of this study was to determine if there is a correlation at the middle school level between teacher stress and building climate, and between student stress and building climate. It was also to determine if there is a correlation at the middle school level between teacher stress and student stress.

PROCEDURE

Students and teachers of five Middle Schools in the Thumb area were surveyed to determine if there was a correlation between stress and building climate.

The students completed the Adolescent Life Change Events Scale and The General School Climate Factors. The teachers completed the Social Readjustment Rating Scale and The General School Climate Factors. Total student scores and total teacher scores were used to determine correlations. Means of the total scores were used to make comparisons between schools based on school characteristics.

MAJOR FINDINGS

1. A correlation of 0.049 (Pearson's r) was found between teacher stress and teacher perception of building climate, which indicates no significant relationship between teacher stress and teacher perception of building climate.

2. A correlation of -0.21 (Pearson's r) was found between student stress and student perception of building climate, which indicates no significant relationship between student stress and student perception of building climate.

3. A correlation of 0.170 (Pearson's r) was found between teacher stress and student stress which indicates no significant relationship between teacher stress and student stress.

4. A correlation of 0.083 (Pearson's r) was found between teacher perception of building and student perception of building climate, which indicates no significant relationship between student stress and student perception of building climate.

5. Differences between school site location, and socioeconomic factors were compared. The only important factors seem to be the relationship between site location with the rural sites providing a lower level of student

stress than the two suburban and one urban site, and
socioeconomic status. The two schools which had the
highest percentage of free and reduced lunch also had the
lowest student stress level. Rural site location and
highest percentage of free and reduced lunch were the same
schools.

ACKNOWLEDGEMENTS

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CHAPTER I

INTRODUCTION

Educational research shows that stress is a problem for teachers. Mark D. Tager, M.D., stated in The School Administrator "...your school district is not unlike the national average. One of six of your employees has hypertension; one in ten has problems with alcohol or drugs, half are obese and almost a quarter of your male employees die of cardiovascular disease before age 65." (Tager, 1983)

As teachers go from low levels of stress to excessively high levels of stress, their performance becomes impaired.(Iwanicki, 1983) Absenteeism, tardiness, reduced efficiency, depression, withdrawal, recurring physical illness and headaches, all symptoms of stress, affect the quality of education. (Iwanicki, 1983 and Eskridge and Coker, 1985)

In addition to teachers reacting to stress, research has shown that students are also affected by stress. Moorefield states "that stress in children, unrecognized and unchecked, can have serious consequences--depression, aggressive behavior, even suicide....A recent study at

Georgetown Universitty in Washington, D.C., showed that children under stress have lower IQ scores than their stress-free classmates on the Weschler Intelligence Scale for Children." (Moorefield, 1984)

Depression, poor self-esteem, prolonged feelings of guilt, physical complaints, loss of appetite, insomnia, no homework, and failing tests, (Moorefield, 1983) are some of the signs of stress in adolescents that affect the quality of their learning.

Around another corner researchers are looking at building climate or environment to determine its significance on effective education. A school with a poor building climate suffers from vandalism, low academic achievement, high absenteeism, apathetic staff and students, and behavior problems. While a school creating a high/positive climate shows an increase in academic achievement, increased attendance, and fewer discipline problems.(Howard, 1978 and Stenson, 1980)

Schools with low building climate seem to suffer from some of the same symptoms that teachers and students have as a result of high levels of stress, i.e., aggression, vandalism, absenteeism, etc..

While research has focused on the performance of individuals or classes of individuals, like nurses, teachers, students, social workers, etc., under stress, there has been no research conducted to determine if there

is a relationship between teacher stress and building climate, between student stress and building climate, or between teacher stress and student stress.

PURPOSE OF STUDY

This study will determine if there is a correlation at the middle school level between teacher stress and building climate, and between student stress and building climate. It will also determine if there is a correlation at the middle school level between teacher stress and student stress.

NEED FOR THE STUDY

"Education in the 1980s is faced with many challenges. Preventing and fighting teacher burnout is one of the most important." (Schwab, 1983) "Teachers experiencing burnout often have physical maladies such as frequent colds, headaches, dizziness, or diarrhea. If unchecked, these ailments may turn into ulcers, colitis, or asthma, or they may cause a loss of appetite and loss of sexual interest. Teachers report that their self-concept drops to a new low as they question the meaning of teaching. They see themselves becoming less and less effective with children and colleagues. The

teacher feels guilty, incompetent as an educator and finally inadequate as a person. This, in turn, affects personal relationships and can result in total emotion breakdown." (Hock, 1985)

Stressed/burned out teachers, who have years of training, either leave the field of education, or they stay in the classroom and create negative effects on students.

One of the symptoms of teacher burnout, the loss of positive feelings, sympathy, and respect for students, helps to create a negative feeling within students and eventually the rest of the staff.

Teachers are under stress as a result of:

*Student Interactions: Teachers interact with students 1000 times on an average day.

*Role conflicts: Teachers are required to be the instructor/ manager/ role model/ disciplinarian/ friend/ colleague.

*Role ambiguities: Lack of clarity in the role that a teacher plays in the total schema of education.

teacher feels guilty, incompetent as an educator and finally inadequate as a person. This, in turn, affects personal relationships and can result in total emotion breakdown." (Hock, 1985)

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*Role conflicts: Teachers are required to be the instructor/ manager/ role model/ disciplinarian/ friend/ colleague.

*Role ambiguities: Lack of clarity in the role that a teacher plays in the total schema of education.

*Boredom:	Teaching the same subject and/or grade, the same year after year after year.

(Iwanicki, 1983; Goens, 1981; Eskridge, 1985; Milstein, 1984; Gupta, 1981)

While we are concerned about stress/burnout of teachers because it can lead to additional stress in students, we also need to be aware of and concerned about the stress within adolescents.

"Stress on the student disrupts normal behavior. The student is either aggressive--fighting and showing verbal disrespect--or passive; grades fall suddenly, homework is not completed; teacher and school officials see the student becoming a discipline problem." (Wolfgang, 1982)

Children are under stress as a result of:

*Broken homes:	3 in 5 born today will live with a single parent by age 18.
*Child care:	2 of 4 children age 13 and under live with parents who both work.
*Drugs:	1 child in 6 has tried marijuana and 1 in 3 alcohol before 9th grade.

*Sex:	The share of girls under 15 who have had sex has tripled in 2 decades.
*Suicide:	The rate for youths under 15 has tripled since 1960.
*Technology growth:	Faster than any other time in the history of the world and it changes faster each day.
*Economic changes:	More job layoffs, two working parents, balance of trade, imports..

(Brophy, Walsh and others, 1986; Greiling and Masserang, 1986)

Even with all of the stress being felt by teachers and students, a number of schools across the country have shown that discipline problems, vandalism, and violence subside as the school climate becomes more positive. In addition, academic achievement and attendance improve. (Howard, 1979 Stenson, 1980)

Because we, as a nation, are increasingly concerned about effective schools, it behooves us to look at many different variables that create effective schools. One of the seven correlates of an effective school, as identified by the Effective Schools Research, is a positive school climate. Moos suggests that school climate/environment

variables warrant consideration in measuring school effectiveness.

Iwanicki and Goens suggest that teacher stress warrants consideration in measuring school effectiveness, while Wolfgang suggests that student stress be taken into consideration in measuring effective schools.

This study is needed to determine if there is a relationship between teacher stress and building climate, student stress and building climate, and teacher stress and student stress.

Definition of Terms

The following terms are defined to assist in the interpretation and understanding of this study.

Stress: An internal response to an external stimulus.(Selye, 1956) In the case of this study a negative response or distress.

Burn out: Emotional exhaustion, a

                           feeling of

                           depersonalization, and a

                           feeling of reduced

                           personal accomplishment.

                           (Iwanicki, 1983; Schwab,

                           1983)

Building Climate: The general mood or

                           feeling that is

                           experienced within a

                           building.(Wallich, 1980)

                           This atmospheric feeling

                           can range from positive/

                           optimistic to negative/

                           pessimistic.

Building

Environment: The circumstances,

                           objects, and/or conditions

                           within a building.

Middle School: A school with any

                           combination of grades 5

                           through 9.

Teacher: An individual who provides
instruction in the
classroom to a group of
students.

Student: A child who is instructed
or taught in a classroom
by a teacher.

Pre-adolescent: A child who is a student
in the Middle School.

Effective School: An effective school is one
in which all the students
learn the intended
curriculum. (Lezotte,
1985)

Assumptions

1. The Social Readjustment Rating Scale by Holmes and
Rahe measures the level of stress in adults.

2. The <u>Adolescent Life Change Events Scale</u> by Yeaworth, York, Hussin, Ingle and Goodwin measures the level of stress in adolescents.

3. The <u>General Climate Factors Inventory</u> by Blust and Dumaresq measures the level of the school climate.

4. The teacher surveys are a random sampling of the teachers in the building.

5. The student surveys are a random sampling of the students in the building.

Limitations

1. The survey was limited to five Middle Schools in the thumb area of Michigan.

2. The study was limited to teacher and student perceptions.

3. The study was limited to those teachers who chose to complete the rating scale and inventory, and to those students whose parents chose to allow their child to complete the rating scale and inventory.

4. The descriptive nature of the study was limited to how accurately teachers and students described their perceptions.

5. The data of the study were affected by the degree of sincerity of the responses to the rating scale and the inventory administered.

RESEARCH QUESTIONS

This study attempted to determine if a correlation exists between stress and building climate. The general research question was, "Stress and building climate: Is there a correlation?"

The specific research questions were:

1. Is there a correlation between teacher stress and building climate?

2. Is there a correlation between student stress and building climate?

3. Is there a correlation between teacher stress and student stress?

4. Is there a correlation between teachers' perception of building climate and students' perception of building climate?

5. Is there a difference between stress levels of rural, urban, or suburban schools?

6. Is there a difference of building climate in rural, urban, and suburban schools?

7. Is there a difference of stress levels based on socio-economic status?

8. Is there a difference in building climate based on socioeconomic status?

Overview of the Study

This study consists of five chapters, a selected bibliography, and appendices.

Chapter I includes the rationale for the study, need for the study, purpose of the study, definition of terms, research questions, assumptions, limitations, and an overview.

Chapter II contains a review of the literature related to the topic.

Chapter III explains and describes the methods and procedures of the study. This includes a description of the population, questionnaire construction, and procedures for collecting and analyzing the data.

Chapter IV is an analysis of the data.

Chapter V presents the summary, findings, and recommendations from the study.

CHAPTER II

Literature Review

Stress affects each person in an individual way, teachers and students alike. Too much stress, leads to burnout, while too little stress results in death. Research shows that teachers and students have varying degrees of stress. This review of literature is concerned with stress in both students and teachers, and the literature on school climate. Some of the literature suggests that school climate affects stress levels but research does not show a relationship between stress and building climate.

Teacher Stress

During the average school day a teacher has many duties and responsibilities that create stress. These stressors interact on each teacher in a different way, even on any given day. The stressors are additive, i.e., they mount up, they build upon each other until we reach a point of dealing with the "straw that breaks the camel's back." (Lemley, 1981)

On the job

People who are involved in prolonged, constant, intensive interaction with people in an emotionally charged atmosphere are susceptible to the syndrome of burnout.(Schwab 1983) On an average day teachers interact one thousand times with students. They also interact with other staff members, parents, and administrators.(Gupta 1981)

In addition to interaction with others, teachers suffer from role ambiguity, role conflict, role overload, role insufficiency, and responsibility for others. (Eskridge and Coker 1985; Huse and Cummings 1985) Role ambiguity occurs when a teacher does not clearly understand what others expect of him or her; while role conflict occurs when a teacher receives contradictory expectations and cannot satisfy the different role demands.(Huse and Cummings, 1985)

Role overload occurs when a teacher has too much work to accomplish in the time available, while role insufficiency occurs when a teacher has inadequate materials, information, and/or equipment to do the job properly.(Eskridge and Coker, 1985) Responsibility for others is a stressor because teachers have the responsibility for shaping the social, emotional and intellectual growth of students.

Another on-the-job stressor that affects teachers is
boredom. Teaching the same subject, year after year, in
the same school, at the same grade level, boredom becomes
a primary factor in burnout. Rare is the teacher who
continues to be exciting and effective after teaching the
same grade and/or same subject for over ten years.
(DiGeronimo, 1985)

Off the job

Dr. Thomas Holmes and Dr. Robert Rahe found
forty-three life events that created stress and were
useful in measuring individual stress rates.(See Appendix
B for Social Readjustment Rating Scale) Many of the
events were negative or undesirable, such as, divorce,
death of a spouse, personal injury, trouble with in-laws,
or foreclosure of a mortgage. While positive events, such
as, marriage, buying a new home, moving, outstanding
personal achievement, vacation, or Christmas, also created
stress.

General Symptoms

Feelings of hopelessness, helplessness, emptiness,
and sadness have been used individually or together to
explain burnout or stress.(Gold 1985)

Maslach took feelings or emotions and listed them as
one aspect of the burnout syndrome, emotional exhaustion.

Teachers find their emotional energies drained daily
through their intense interactions with students.(Gupta,
1981)

In the second aspect, depersonalization, teachers
develop negative, cynical attitudes toward students.
Students are referred to as clutsie, squirrely, beastie,
insolent, or any number of pet derogatory names.

In the final aspect of burnout, the loss of feeling
of accomplishment from the job, teachers lose their sense
of purpose or reason for teaching. Teachers begin to have
detrimental effects on their colleagues, their students,
and their school.(Jackson, 1983; Iwanicki, 1983; Schwab,
1983)

Specific symptoms and consequences

Some of the common symptoms of chronic stress or
burnout identified in the literature (Iwanicki, 1983;
Hock, 1985; Welch, 1983; Eskridge, 1985; Miller, 1979) are
listed in Figure 1.

| <u>Symptoms</u> |

Depression	Insomnia	Diabetes
Withdrawal	Impotence	Ulcers
Headaches	Chronic colds	Colitis
Allergies	Cancer	High blood pressure
Mood swings	Irritability	Paranoia
Dizziness	Diarrhea	Asthma
Constipation	Heart disease	Indigestion
Bronchitis	Low vitality	Loss of appetite

Figure 1. Common symptoms of chronic stress

As a result of the common symptoms and increased
stress or burnout, potentially severe consequences, as
identified in the literature (Iwanicki, 1983; Goens, 1981;
Eskridge, 1985; Bensley, 1986; Jackson, 1983; Gupta, 1981;
Miller, 1979; Milstein and Golaszewski, 1984) and listed
in Figure 2, can affect the teacher and ultimately
students.

| <u>Potential Consequences</u> |

Alcoholism	Divorce	Absenteeism
Drug addiction	Suicide	Job Dissatisfaction
Accidents	Obesity	Excessive Smoking
Tardiness	Staff turnover	Reduced efficiency
Family problems		Interpersonal Friction

Figure 2. Potential consequences of chronic stress

Student stress

A review of the literature on student stress, finds no clear separation between home-society crisis and school crisis for an adolescent. Research shows that what occurs outside of school affects school performance, and what occurs inside of school impacts the home-society setting. (Wolfgang, 1982)

Much of the stress that is experienced by middle school students revolves around five major tasks: (1) managing shifts in role definitions and expectations; (2) managing shifts in social networks; (3) reorganizing personal social support resources; (4) reappraising oneself and one's life situation; and (5) managing the stress related to uncertain expectations, goals, and abilities. (Bruene, 1985)

The literature repeats these five tasks in different and varying formats. It is the most intense phase of human development. For an adolescent it is a time of rapid change socially, emotionally, physically, and mentally. (Dempsey, 1986)

Family restructuring, separation, divorce, and single parent households, affects at least one child out of every four.(Greiling and Masserang, 1986) As an adolescent begins to seek other social support, stability in the home helps to keep stress at a low level.

In addition to the five major tasks we find
unprecedented technological growth, fragile economies and
changes in societal values, (Greiling and Masserang, 1986)
coupled with the shedding of the relatively comfortable
role of a child for that of a responsible adult, creating
burnout in students.(Dempsey, 1986)

Zig Ziglar states that one out of every eighteen
comments made to adolescents during the school day is
positive. Research by The Association for Supervision and
Curriculum Development shows one out of every five
student/teacher interactions is positive. The literature
shows that children who are put down, teased and made fun
of become alienated and lonely. (Kaiser, 1983) They also
have poor self-concepts, do poorly in school, (Purkey)
and suffer from an inordinate amount of stress.

The Adolescent Life Change Events Scale (See Appendix
B) identifies and uses the most common sources of stress
that adolescents experience to determine stress level.
Many of the events listed in the Adolescent Life Change
Events Scale are negative in nature, such as the death of
a close relative or friend, divorce of parents, or serious
personal injury. There are also positive events which
create stress, such as, starting to date, making new
friends, or starting a new job. The scale was designed
specifically for adolescents. It is not an adult list or
scale adjusted for adolescents, or a scale created by

adults for adolescents. The <u>Adolescent Life Change Events
Scale</u> was designed through research with adolescents.
(Yeaworth, York, Hussey, Ingle, Goodwin, 1980)

Broken homes, drugs, alcohol, sex (Brophy, Walsh,
1986) and more recently AIDS have added to the rising
level of stress in adolescents.

Symptoms

As the stress level increases in an adolescent, the
same physical ailments that plague stress riddled adults
appear. But adolescents do not handle their stress in the
same way intellectually as adults. Adolescents do not
have the ability to put things into perspective like an
adult. Every bad thing to an adolescent is so
catastrophic, so now, so forever. (Edelman, 1986)

When adolescents are under stress, they exhibit
wheezing, dizziness, chest pains and/or stomach problems.
(Brophy, 1986) Ninety to ninety-five percent of the
headaches and stomachaches in adolescents are psychogenic.
(Falk, 1986)

Consequences

Verbal abuse, anger, anorexia nervosa (Falk, 1986)
are aggressive consequences of excessive adolescent

stress. (Wolfgang, 1982) Passive consequences are seen as laziness, lack of motivation, incomplete homework, and falling grades. (Wolfgang, 1986)

Other consequences cited in the literature include drug abuse, alcoholism, suicide, (Dempsey, 1986), absenteeism and discipline problems. (Matthews, 1984)

Morefield gives the warning signs or consequences of stress as: (1) persistent sadness; (2) poor self-esteem; (3) prolonged feelings of guilt; (4) physical complaints like headaches and stomachaches; (5) undue concern about death; (6) academic problems; (7) loss of appetite and disturbed sleep.

The literature does not address the relationship between student stress and teacher stress.

Building Climate

While looking at the stress levels of people, staff and students, the literature points to positive building climates as an important part of effective schools. One of the seven correlates of an effective school is a positive school climate: a positive attitude on the part of the entire staff and student body exhibited through overt behavior that creates an orderly learning environment.(Licata, 1987)

The atmosphere must be conducive to academic growth and development of staff and students alike.(Stevens,

undated) Put-down statements and negative language patterns are many times the triggers and/or reasons for chronic absenteeism and deeply affects the self-image of everyone. (Duffy, 1987) High absenteeism is a consequence and/or symptom of high levels of stress.(Matthews, 1984; Iwanicki, 1983; Goens, 1981, Eskridge, 1985; Bensley, 1986; Jackson, 1983)

<u>Eight factors</u>

Building climate, the ambiance, mood, or feeling that is experienced within the building, is relatively intangible. It is comprised of at least eight interacting factors. As Wallich states, "Ideally, there should be evidence of:

1. <u>Respect</u>. Students should see themselves as persons of worth, believing that they have ideas, and that those ideas are listened to and make a difference. Teachers and administrators should feel the same way. School should be a place where there are self-respecting individuals. Respect is also due others.
2. <u>Trust</u>. Trust is reflected in one's confidence that others can be counted on to behave in a way that is honest. They will do what they say they will do.
3. <u>High morale</u>. People with high morale feel good about what is happening in school.
4. <u>Opportunities for Input</u>. Not all persons can be involved in making the important decisions. Not always can each person be as influential as he might like to be on the many aspects of the school's programs and processes that affect him. But, every person cherishes the opportunity to contribute his or her ideas, and know that they have been considered. A feeling of a lack of voice is counterproductive to self-esteem and deprives the school of that person's resources.
5. <u>Continuous Academic and Social Growth</u>. Each student needs to develop additional academic,

social and physical skills, knowledge and attitudes. (Many educators have described the growth process as achieving "Developmental tasks." Educators, too, desire to improve their skills, knowledge, and attitudes in regard to their particular assignments within the school district and as cooperative members of a team.)

6. Cohesiveness. This quality is measured by the person's feeling toward the school. Members feel a part of the school. They want to stay with it, and have a chance to exert their influence on it in collaboration with others.

7. School Renewal. The school as an institution should develop improvement projects. It should be self-renewing in that it is growing, developing and changing rather than following routines, repeating previously accepted procedures and striving for conformity. If there is renewal, difference is seen interesting, to be cherished. Diversity and pluralism are valued. New conditions are faced with poise. Adjustments are worked out as needed. The "new" is not seen as threatening, but as something to be examined, weighed, and its value or relevance determined. The school should be able to organize improvement projects rapidly and efficiently, with an absence of stress and conflict.

8. Caring. Every individual in the school should feel that some other person or persons are concerned about him as a human being. Each knows it will make a difference to someone else if he is happy or sad, healthy or ill. (Teachers should feel that the principal cares about them even when they make mistakes or disagree. And the principal should know that the teachers -- at least most of them -understand the pressures under which he or she is working and will help if they can.)" (Wallich, 1980)

If each school administer identifies those aspects in the environment or climate that are stressors to the teachers and the students and attempts to alleviate or alter the phenomena so that stress reduction occurs, then

the school should become a pleasant place to work or
study.(Gupta, 1981) But is there a relationship between
the building climate and teacher and/or student stress?

The literature does not address this question, even
though it does provide research on teacher stress, student
stress and building climate. Therefore this study will
determine if there is a relationship between building
climate and teacher stress and/or student stress.

CHAPTER III

DESIGN OF THE STUDY

PURPOSE

This study will determine if there is a correlation at the middle school level between teacher stress and building climate, and between student stress and building climate. It will also determine if there is a correlation at the middle school level between teacher stress and student stress.

POPULATION

Five middle schools from the Thumb Area of Michigan were selected to participate in this study. In each of the schools a random sample of at least 60 pupils and 10 teachers were selected to complete the two survey instruments. The smaller schools had a larger number of teachers and students who completed the surveys.

The five schools represented a cross-section of the Thumb area. School #1 was located in a suburban area, schools #2 and #3 were located in a rural setting, and school #4 was located in an urban setting. School student populations ranged from 290 students to 1305 students.(See

Figure #3) Socioeconomic status is indicated by the percentage of students who receive free or reduced lunch. A high percentage of students who receive free or reduced lunch indicates or suggests a lower economic status. Percentages ranged from 9.0% to 24%. (See Table #1)

Consideration was also given to the school districts per pupil expenditure. Per pupil expenditure ranged from $2617 to $3329.(See Table #1)

Table #1 School Characteristics

School	#1	#2	#3	#4	#5
Grade Level	5-8	5-7	7-8	6-8	6-8
Free/reduced lunch	14%	23%	24%	13.5%	9.0%
Site Location	suburb	rural	rural	urban	suburb
Student Population	1305	302	270	600	523
Expenditure Per Pupil	$2865	$2617	$3000	$3072	$3329

SURVEY FORMS

The Social Readjustment Rating Scale (See Appendix A) by Holmes and Rahe was used to determine the stress level of teachers, while the Adolescent Life Change Events Scale (See Appendix B) by Yeoworth, et al, was used to determine

stress level of students. Both surveys indicate the level of stress that an individual has experienced during the last year.

Each individual who completed one of these surveys was asked to answer "yes" to each of the statements if they had experienced the event within the last year, or "no" if they had not experienced the event within the last year.

Each "yes" statement was assigned the value given by the test designers. These values were then totaled to give a stress level for each individual.

The second survey form, The General School Climate Form (See Appendix B) by Blust and Dumaresque, was completed by both teachers and students. It was modified from the original survey form by excluding the middle choice "No Feeling". Values of 1 to 4 were assigned to the responses with 4 being the most positive response. The values were then totaled to provide a building climate level for each individual.

VALIDITY

Steps taken to ensure validity of each instrument included a review of the literature to find research studies that showed the instruments were valid and reliable.

The Social Readjustment Rating Scale has been shown
to be valid and reliable. Holmes and Rahe in 1967 showed
that the Social Readjustment Rating Scale had a
coefficient of correlation within American society across
groups differing in sex, marriage, age, generations,
socioeconomic status, ethnic background or religious
preference above 0.90 with the exception of that between
white and Negro which was 0.82.(Holmes and Rahe, 1967) The
average correlation of coefficient (Pearsons r) was 0.94
with 1.0 representing perfect correlation.(Masuda and
Holmes, 1967)

The Adolescent Life Change Events Scale was cross
validated by administering the Adolescent Life Change
Events Scale to another group of adolescents._ "Rank order
coefficients were computed between ratings obtained by the
current sample and those obtained by the original sample
exceed .90."(Forman, Eidson, and Hagan, 1983)

Ross A. Blust of Pennsylvania State Department of
Education explained that the Wilcoxan split halves method
was used to determine internal consistency. He stated
that the instrument was valid. The General School Climate
Factors Scale was used over a period of three years and
proved reliable during that period of time.(Blust and
Demaresque, 1984)

DATA GATHERING

Superintendents of the five school districts were contacted to explain the purpose of the study and to obtain permission to contact the principal of a Middle School in their district. The five superintendents approved the study.

Principals of the five Middle Schools were initially contacted by phone and then in person to present the study and the procedures to follow. The principals assisted by providing basic information about their school, i.e., school population, grade levels, site location, percent of students receiving free or reduced lunch, and school district expenditure per pupil. They also provided assistance through supervising the completion of the survey instruments.

Students were not allowed to complete the study unless written, parental permission was given. Letters, explaining the study, and permission slips were sent home with randomly selected students. (Appendix A) These were signed by parents and returned before a student was allowed to complete the survey forms.

Building #1 completed and returned thirty-one teacher surveys and fifty-nine student surveys. Building #2 completed and returned sixteen teacher surveys and eighty-three students surveys. Building #3 completed

eleven teacher surveys and seventy-four students surveys.
Building #4 completed eighteen teacher surveys and one
hundred thirteen student surveys. Building #5 completed
eight teacher surveys and thirty-three student surveys.
(See Table #2)

Table #2 Surveys Completed and Returned

School	#1	#2	#3	#4	#5
Students	59	83	74	113	33
Teachers	31	16	11	18	8

PROCEDURE FOR ANALYSING DATA

Data for this study consisted of the teacher
responses to the Social Readjustment Rating Scale and The
General School Climate Factors and student responses to
the Adolescent Life Change Events Scale and The General
School Climate Factors.

When the responses were returned, the information was
keyed into an IBM PC and Number Cruncher Statistical
System was used to analyze the data. Distributive
statistics, mean and standard deviations, and correlation
coefficient, Pearsons r, were used for each of the areas
being studied.

INTERPRETATION OF DATA

The survey instruments provided data for the following correlations:

Teacher stress and teacher perception of building

Student stress and student perception of building

Teacher stress and student stress

Teacher perception and student perception

In addition to the correlations the data provided an opportunity to compare stress and building climate using student population, site location, grade levels, socioeconomic status based on free/reduced lunch, and per pupil expenditure.

The mean of the responses for teacher stress will be as interpreted as follows: 1) a mean of over 300 will indicate a high level of stress; 2) a mean between 200 and 299 moderate stress; and 3) a mean under 200 a low level of stress.

The mean of the responses for student stress will be as interpreted as follows: 1) a mean of over 300 will indicate a high level of stress; 2) a mean between 200 and 299 moderate stress; and 3) a mean under 200 a low level of stress.

The mean of the responses for teachers and students for building climate will be as interpreted as follows: 1) a mean of over 72 will indicate a high, positive building climate; 2) a mean between 48 and 71.9 moderately, mixed building climate; and 3) a mean under 48 a low, negative building climate.

RESEARCH QUESTIONS

The objective of this study was to determine if a correlation exists between stress and building climate. The general research question was, "Stress and building climate: Is there a correlation?"

The specific research questions were:

1. Is there a correlation between teacher stress and building climate?

2. Is there a correlation between student stress and building climate?

3. Is there a correlation between teacher stress and student stress?

4. Is there a correlation between teachers' perception of building climate and students' perception of building climate?

5. Is there a difference between stress levels of rural, urban, or suburban schools?

6. Is there a difference of building climate in rural, urban, and suburban schools?

7. Is there a difference of stress levels based on socioeconomic status?

8. Is there a difference in building climate based on socioeconomic status?

SUMMARY

Students and teachers of five Middle Schools in the Thumb area were surveyed to determine if there was a correlation between stress and building climate.

The students completed the Adolescent Life Change Events Scale and The General School Climate Factors. The teachers completed the Social Readjustment Rating Scale and The General School Climate Factors. Total student scores and total teacher scores were used to determine correlations. Means were used to make comparisons between schools based on school characteristics.

All information was keyed into an IBM PC and the statistics were generated by Number Cruncher Statistical System.

CHAPTER IV

ANALYSIS OF DATA

This chapter presents the data related to the purpose of this study which was to determine if there is a correlation at the middle school level between teacher stress and building climate, and between student stress and building climate. It was also to determine if there is a correlation at the middle school level between teacher stress and student stress.

Teachers completed the Social Readjustment Rating Scale and the General School Climate Factors providing data on teacher stress and teacher perception of building climate. Students completed the Adolescent Life Change Events Scale and the General School Climate Factors providing data on student stress and student perception of building climate.

Demographic information was obtained on the grade levels in each school, site location, percent of students receiving free or reduced lunch, and per pupil expenditure by the local school district.

The data analysis is presented in the following
manner:

1. Data related to demographics is presented.

2. Each research question is restated, appropriate
    data presented, and an explanation is provided.

3. The means are interpreted as follows on the:

    a. Social Readjustment Rating Scale

        0 to 199   low level of stress

        200 to 299   moderate level of
                       stress

        over 300   high level of stress

    b. Adolescent Life Change Events Scale

        0 to 199   low level of stress

        200 to 299   moderate level of
                       stress

        over 300   high level of stress

    c. General School Climate Factors

        24 to 47   low climate

        48 to 71   moderately positive
                       climate

        72 to 96   high climate

Research Questions

Research Question #1

Is there a correlation between teacher stress and building climate?

Using the data collected from the Social Readjustment Rating Scale and the General School Climate Factors survey, a correlation of 0.049 (Pearson's r) was determined. This indicates there is no significant relationship between teacher stress, as shown by the Social Readjustment Rating Scale, and teacher perception of building climate, as shown by the General School Climate Factors survey.

Table #3 Teacher Data

	Mean	Standard Deviation
Social Readjustment Rating Scale	232	150.47
General School Climate Factors	74.36	10.54

Research Question #2

Is there a correlation between student stress and building climate?

Using the data collected from the Adolescent Life Change Events Scale and the General School Climate

<u>Factors</u> survey, a correlation of -0.21 (Pearson's r) was determined. This indicates there is no significant relationship between student stress, as shown by the <u>Adolescent Life Change Events Scale</u>, and student perception of building climate, as shown by the <u>General School Climate Factors</u> survey.

Table #4 Student Data

	Mean	Standard Deviation
Adolescent Life Change Events Scale	239.31	197.3
General School Climate Factors	67.3	14.9

Research Question #3

Is there a correlation between teacher stress and student stress?

Using the data collected from the <u>Social Readjustment Rating Scale</u> and the <u>Adolescent Life Change Events Scale</u>, a correlation of 0.170 (Pearson's r) was determined. This indicates there is no significant relationship between teacher stress, as shown by the <u>Social Readjustment Rating Scale</u>, and student stress, as shown by the <u>Adolescent Life Change Events Scale</u>.

Table #5 Stress Data

	Mean	Standard Deviation
Social Readjustment Rating Scale	232	150.47
Adolescent Life Change Events Scale	239.31	197.3

Research Question #4

Is there a correlation between teachers' perception of building climate and students' perception of building climate?

Using the data collected from the General School Climate Factors survey for both teachers and students, a correlation of 0.083 (Pearson's r) was determined. This indicates there is no significant relationship between teacher perception of building climate, and student perception of building climate, as shown by the General School Climate Factors survey.

Table #6 Climate Data

Climate Data	Mean	Standard Deviation
Teacher Responses General School Climate Factors	74.36	10.54
Student Responses General School Climate Factors	76.3	14.9

Research Question #5

Is there a difference of stress levels of rural, urban or suburban schools?

According to the data from the Social Readjustment Rating Scale, the stress levels for teachers ranged from a mean of 201.75 for teachers at one of the suburban schools to a high of 287.50 at one of the rural schools.(See Tables #7 and #8) There are differences in the amount of teacher stress between schools but it does not seem to be based on site location.

Table 7. Teacher Stress Levels at different school sites

232.80	242.13	287.50	204.22	201.75
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

Table 8. Teacher Stress Levels at different school sites
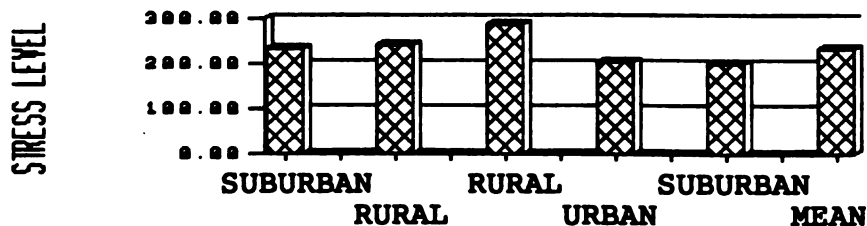
The data from the <u>Adolescent Life Change Events</u>
<u>Scale</u> showed the stress levels for students ranged from a
mean of 256.07 for students at one the rural schools to a
high of 338.67 at one of the suburban schools.(See Tables
#9 and #10) There are differences in the amount of student
stress between schools and it may be based on site
location. The two rural schools had the lowest level of
student stress, while the two suburban schools had the
highest level of student stress.

Table 9. Student Stress Levels
at different sites

345.71	271.00	257.07	293.50	338.67
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

Table 10. Student Stress Levels
at different sites
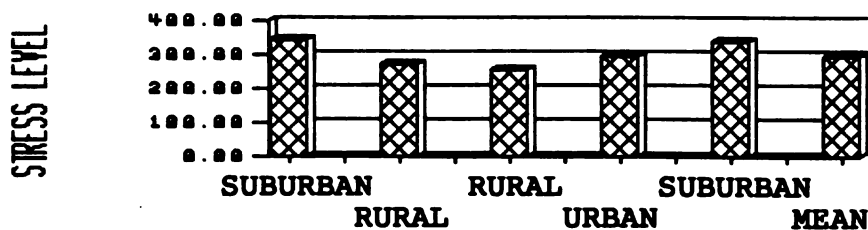
Research Question #6

Is there a difference of building climate in rural, urban, or suburban schools?

The General School Climate Factors survey showed the perception of the building climate by teachers ranged from a low median score of 71.63 in one of the rural schools to a high median score of 80.20 in the other rural school.(See Tables #11 and #12) There is a difference of teacher perceptions of building climate but it does not seem to be related to site location.

Table 11. Teacher Perception of Climate
at different site locations

72.94	71.63	80.20	76.60	73.00
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

Table 12. Teacher Perception of Climate
at different site locations
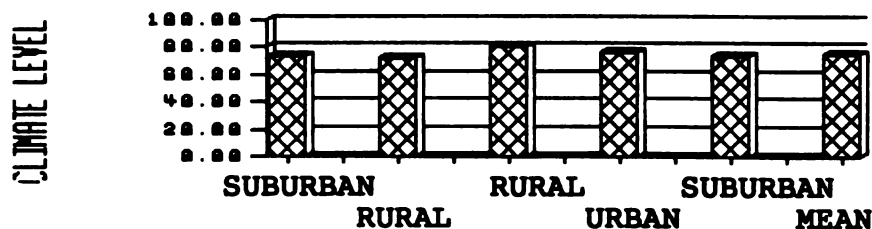
On the General School Climate Factors survey, the perception of the building climate by students ranged from

a low median score of 73.78 in one of the suburban schools
to a high median score of 76.06 in one of the rural
school.(See Tables #13 and #14) There seems to be a
difference of student perceptions of building climate but
it does not seem to be related to site location.

**Table 13. Student Perception of Climate
at different site locations**

63.78	76.06	64.41	64.52	67.55
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

**Table 14. Student Perception of Climate
at different site locations**
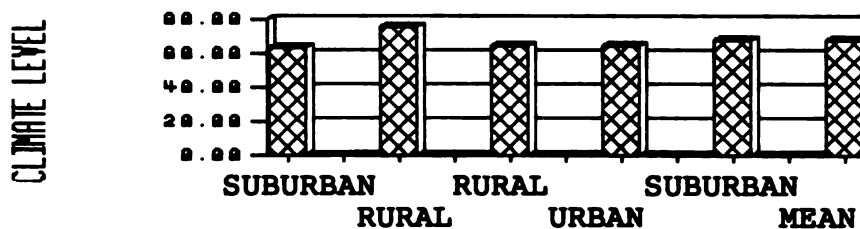
Research Question #7

Is there a difference of stress levels based on
socioeconomic status?

According to the Social Readjustment rating Scale,
the level of teacher stress ranged from a low 201.75 in
the school which had 9% of its students receiving free or
reduced lunch to a high of 287.50 in the school which had

24% of its students receiving free or reduced lunch.(See
Tables #15 and #16) Using the means of teacher stress
levels for each school and the percent of students who
received free/reduced lunch, a correlation of .837
(Pearson's r) was found. There is a relationship between
teacher stress levels and student socioeconomic status.
Schools with the highest percentage of students receiving
free or reduced lunches also had the highest level of
teacher stress.

Table 15. Teacher Stress and Student Socioeconomic
Status

232.80	242.13	287.50	204.22	201.75
14%	23%	24%	13.5%	9%

Table 16. Teacher Stress and Student Socioeconomic
Status
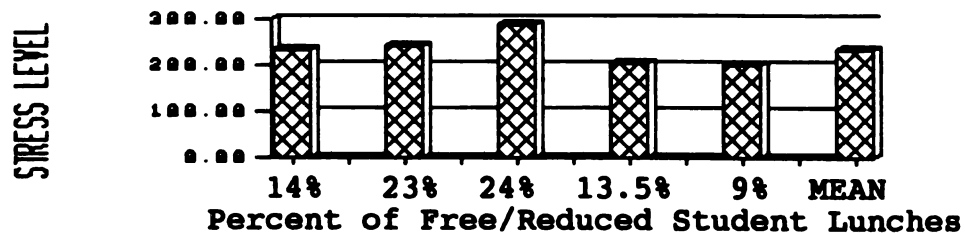
According to the Adolescent Life Change Events Scale,
the level of student stress ranged from a low 256.07 in
the school which had 24% of its students receiving free or

reduced lunch to a high of 345.71 in the school which had 14% of its students receiving free or reduced lunch. (See Tables #17 and #18) Using the means of student stress levels for each school and the percent of students who received free/reduced lunch, a correlation of -.834 (Pearson's r) was found. There is a negative relationship between student stress levels and student socioeconomic status. Schools with the highest percentage of students receiving free or reduced lunches also had the lowest level of student stress.

Table 17. Student Stress and Student Socioeconomic
Status

345.71	271.00	257.07	293.50	338.67
14%	23%	24%	13.5%	9%

Table 18. Student Stress and Student Socioeconomic
Status
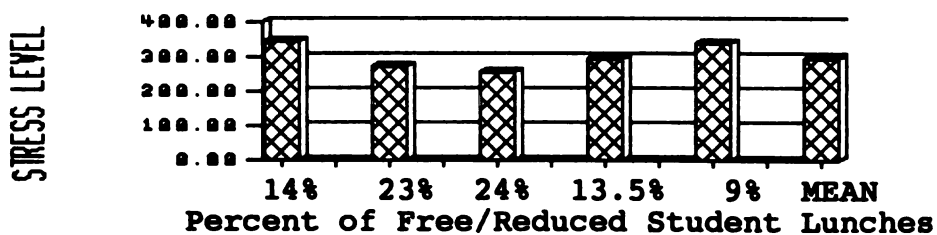
STRESS LEVEL

Percent of Free/Reduced Student Lunches

Research Question #8

Is there a difference in building climate based on socioeconomic status?

According to the General School Climate Factors, the perception of the building climate by teachers ranged from a low 71.63 in the school which had 23% of its students receiving free or reduced lunch to a high of 80.20 in the school which had 24% of its students receiving free or reduced lunch.(See Tables #19 and #20) Using the means of teacher climate levels for each school and the percent of students who received free/reduced lunch, a correlation of .356 (Pearson's r) was found. There is no relationship between teacher climate levels and student socioeconomic status. The two schools with the highest percentage of students receiving free or reduced lunches had the lowest teacher perception of building climate and the highest teacher perception of building climate.

Table 19. Teacher Perception of Climate and Student Socioeconomic Status

72.94	71.63	80.20	76.60	73.00
14%	23%	24%	13.5%	9%

Table 20. Teacher Perception of Climate and Student
Socioeconomic Status
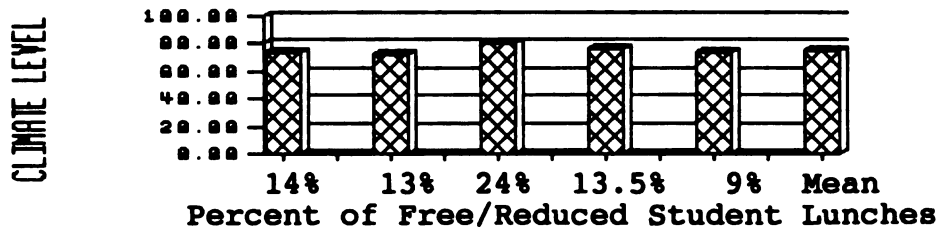
CLIMATE LEVEL

```
100.00
 80.00
 60.00
 40.00
 20.00
  0.00
```
14%   13%   24%   13.5%   9%   Mean
Percent of Free/Reduced Student Lunches

According to the <u>General School Climate Factors</u>, the perception of the building climate by students ranged from a low 63.78 in the school which had 14% of its students receiving free or reduced lunch to a high of 76.06 in the school which had 23% of its students receiving free or reduced lunch.(See Tables #21 and #22) Using the means of student climate levels for each school and the percent of students who received free/reduced lunch, a correlation of .378 (Pearson's r) was found. There is no relationship between teacher climate levels and student socioeconomic status. The two schools with the highest percentage of students receiving free or reduced lunches had the second lowest teacher perception of building climate and the highest student perception of building climate.

Table 21. Student Perception of Climate and Student
Socioeconomic Status

63.78	76.06	64.41	64.52	67.55
14%	23%	24%	13.5%	9%

Table 22. Student Perception of Climate and Student
Socioeconomic Status
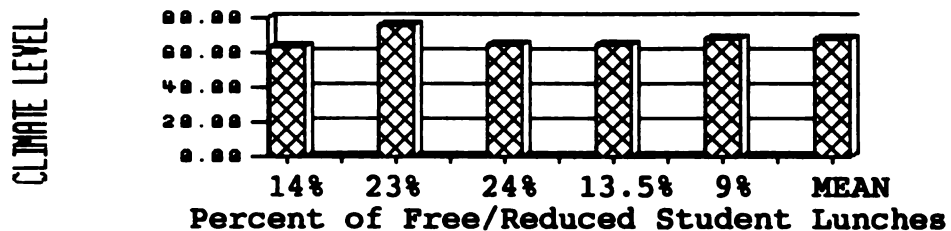
Percent of Free/Reduced Student Lunches

SUMMARY

The purpose of this study was to determine if there is a correlation at the middle school level between teacher stress and building climate and student stress and building climate. It was also to determine if there was a correlation t the middle school level between teacher stress and student stress.

Teachers and students in five middle schools from the Thumb Area of Michigan were requested to complete two surveys. The teachers completed the Social Readjustment Rating Scale and the General School Climate Factors survey, while the students completed the Adolescent Life

<u>Change Events Scale</u> and the <u>General School Climate</u>
<u>Factors</u> survey.

A correlation between teacher stress and teacher
perception of building climate was processed using
individual total scores. The correlation was 0.049
(Pearson's r). Indicating no significant relationship
between teacher stress and teacher perception of building
climate.

A correlation between student stress and student
perception of building climate was processed using
individual total scores. The correlation was -0.21
(Pearson's r). Indicating no significant relationship
between student stress and student perception of building
climate.

A correlation between teacher stress and student
stress was processed using individual total scores. The
correlation was 0.170 (Pearson's r). Indicating no
significant relationship between teacher stress and
student stress.

A correlation between teacher perception of building
and student perception of building climate was processed
using individual total scores. The correlation was 0.083
(Pearson's r). Indicating no significant relationship
between student stress and student perception of building
climate.

Differences between school site location, and socioeconomic factors were compared. The only important factors seem to be the relationship between site location with the rural sites providing a lower level of student stress than the two suburban and one urban site, and socioeconomic status. The two schools which had the highest percentage of free and reduced lunch also had the lowest student stress level. Rural site location and highest percentage of free and reduced lunch were the same schools.

CHAPTER V

SUMMARY, FINDINGS, AND RECOMMENDATIONS

This final chapter is a summary of the study, discussion of the conclusions from the analysis of the data, and recommendations for further research.

Summary

The purpose of this study was to determine if there is a correlation at the middle school level between teacher stress and building climate, and between student stress and building climate. It was also to determine if there is a correlation at the middle school level between teacher stress and student stress.

The literature was reviewed to ascertain information and data on teacher stress, student/adolescent stress, and building climate. The literature was also reviewed to find information about the relationship between these three factors.

The limitations of the study included: 1) being limited to five Middle Schools in the Thumb area of Michigan; 2) being limited to teacher and student perceptions; 3) being limited to those teachers who chose to complete the rating scale and inventory, and to those students whose parents chose to allow their child to complete the rating scale and inventory; 4) The

descriptive nature of the study being limited to how
accurately teachers and students described their
perceptions; 5) The data of the study being affected by
the degree of sincerity of the responses to the rating
scale and the inventory administered.

Design of the Study

Students and teachers of five Middle Schools in the
Thumb area were surveyed to determine if there was a
correlation between stress and building climate.

The students completed the Adolescent Life Change
Events Scale and The General School Climate Factors. The
teachers completed the Social Readjustment Rating Scale
and The General School Climate Factors. Total student
scores and total teacher scores were used to determine
correlations. Means of the total scores were used to make
comparisons between schools based on school
characteristics.

Findings

Research Question 1:

**Is there a correlation between teacher stress and building
climate?**

Using the data collected from the Social Readjustment
Rating Scale and the General School Climate Factors

survey, a correlation of 0.049 (Pearson's r) was
determined. This indicates there is no significant
relationship between teacher stress, as shown by the
Social Readjustment Rating Scale, and teacher perception
of building climate, as shown by the General School
Climate Factors survey.

Discussion:

"Recent studies on stress and burnout indicate that
as many as 25 percent of K-12 teachers may be experiencing
a damaging degree of burnout."(Schlansker, 1987)

With the severe consequences of stress or burnout
being high absenteeism, low job satisfaction, reduced
efficiency, and interpersonal friction, one could be led
to believe that a relationship exists between teacher
stress and building climate. This study did not find a
relationship between teacher stress and building climate.

Research Question 2
Is there a correlation between student stress and building
climate?

Using the data collected from the Adolescent Life
Change Events Scale and the General School Climate
Factors survey, a correlation of -0.21 (Pearson's r) was
determined. This indicates there is no significant
relationship between student stress, as shown by the

Adolescent Life Change Events Scale, and student
perception of building climate, as shown by the General
School Climate Factors survey.

Discussion

With suicide being the ultimate consequence for
adolescent stress, if there is any validity to the
statement "Are suicides a sign of the times, a warning
signal that there exists an era of turbulence, trouble,
and instability for today's youth?...the number of
reported adolescent suicides has increased 400% in the
last 20 years." (Johnson, 1987), one could be led to
believe that a relationship exists between student stress
and building climate. This study did not find that
relationship.

Research Question 3

Is there a correlation between teacher stress and student
stress?

Using the data collected from the Social Readjustment
Rating Scale and the Adolescent Life Change Events Scale,
a correlation of 0.170 (Pearson's r) was determined. This
indicates there is no significant relationship between
teacher stress, as shown by the Social Readjustment Rating
Scale, and student stress, as shown by the Adolescent Life
Change Events Scale.

Discussion

Even though symptoms and consequences of stress are similar in adults and students, there are two areas that would allow for the fact that no relationship exists. First, even though some of the events that create stress for adults are similar to events that create stress for adolescents, many of the smaller less stressful events for adults are extremely stressful to adolescents.

Secondly, is the difference in handling stress. Adolescents do not handle their stress in the same way intellectually as adults. Adolescents do not have the ability to put things into perspective like an adult. Every bad thing to an adolescent is so catastrophic, so now, so forever. (Edelman, 1986)

Research Question 4

Is there a correlation between teachers' perception of building climate and students' perception of building climate?

Using the data collected from the General School Climate Factors survey for both teachers and students, a correlation of 0.083 (Pearson's r) was determined. This indicates there is no significant relationship between

teacher perception of building climate, and student
perception of building climate, as shown by the General
School Climate Factors survey.

Discussion

In visiting each building, it became clear that
teachers and students do not share the same value system
as it relates to the building climate. In the buildings
that have a high student climate there is a belief and
trust in each and every student, teachers care for and
respect students, and the principal really cares about the
students. In buildings that have a high teacher climate
there is a belief or understanding that the building is
for adults first, students second.

Research Question 5
**Is there a difference between stress levels of rural,
urban or suburban schools?**

According to the data from the Social Readjustment
Rating Scale, the stress levels for teachers ranged from a
mean of 201.75 for teachers at one of the suburban schools
to a high of 287.50 at one of the rural schools.(See
Table #23) There are differences in the amount of teacher
stress between schools with the rural schools having the
highest level of teacher stress.

Discussion

Teacher stress does not seem to be related to site location but to socioeconomic status of students. "A great deal of stress among teachers is caused through dealing with children who come from areas where there are a relatively large number of financially deprived homes." (Goodman, 1980)

Table 23. Teacher Stress Levels

232.80	242.13	287.50	204.22	201.75
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

The data from the Adolescent Life Change Events Scale showed the stress levels for students ranged from a mean of 256.07 for students at one the rural schools to a high of 338.67 at one of the suburban schools.(See Tablee #24) There are differences in the amount of teacher stress between schools and it may be based on site location. The two rural schools had the lowest level of student stress, while the two suburban schools had the highest level of student stress.

Table 24. Student Stress Levels

345.71	271.00	257.07	293.50	338.67
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

Discussion

In a discussion with Reverend Roy Langset, a minister in a small rural town, he stated that the rural town acts as an extended family. The town is small, everyone knows everyone and much of the population is related. When children are not receiving the help and/or support from home, someone in the community reaches out and provides the needed help and support. Many rural communities tend to be stable over time and stability in the home or extended family helps to keep stress at a low level for adolescents .

Research Question 6

Is there a difference of building climate in rural, urban, and suburban schools?

The General School Climate Factors survey showed the perception of the building climate by teachers ranged from a low median score of 71.63 in one of the rural schools to a high median score of 80.20 in the other rural

school.(See Table #25) There is a difference of teacher perceptions of building climate but it does not seem to be related to site location.

Table 25. Teacher Perception of Climate

72.94	71.63	80.20	76.60	73.00
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

On the General School Climate Factors survey, the perception of the building climate by students ranged from a low median score of 73.78 in one of the suburban schools to a high median score of 76.06 in one of the rural school.(See Table #26) There seems to be a difference of student perceptions of building climate but it does not seem to be related to site location.

Table 26. Student Perception of Climate

63.78	76.06	64.41	64.52	67.55
SUBURBAN	RURAL	RURAL	URBAN	SUBURBAN

Discussion

The differences in building climate seems to be related to who the building was for. The school with the highest teacher climate was a building oriented to and provided for the needs of the adults. The building with

the highest student climate was oriented to and provided for the needs of the students.

Research Question 7

Is there a difference of stress levels based on socioeconomic status?

According to the Social Readjustment rating Scale, the level of teacher stress ranged from a low 201.75 in the school which had 9% of its students receiving free or reduced lunch to a high of 287.50 in the school which had 24% of its students receiving free or reduced lunch.(See Table #27) Using the means of teacher stress levels for each school and the percent of students who received free/reduced lunch, a correlation of .837 (Pearson's r) was found. There is a relationship between teacher stress levels and student socioeconomic status.

Discussion

This may be accounted for in the fact that teachers feel greater pressure working with students who are socioeconomically disadvantaged. "A great deal of stress among teachers is caused through dealing with children who come from areas where there are a relatively large number of financially deprived homes." (Goodman, 1980)

Table 27. Teacher Stress and Student Socioeconomic

232.80	242.13	287.50	204.22	201.75
14%	23%	24%	13.5%	9%

Status

According to the <u>Adolescent Life Change Events Scale</u>, the level of student stress ranged from a low 256.07 in the school which had 24% of its students receiving free or reduced lunch to a high of 345.71 in the school which had 14% of its students receiving free or reduced lunch.(See Table #28) Using the means of student stress levels for each school and the percent of students who received free/reduced lunch, a correlation of -.834 (Pearson's r) was found. There is a negative relationship between student stress levels and student socioeconomic status.

Table 28. Student Stress and Student Socioeconomic
Status

345.71	271.00	257.07	293.50	338.67
14%	23%	24%	13.5%	9%

<u>Discussion</u>

This finding is inconsistent with a study done by Mullins (1982). "The level of depressive symptoms was

also found to be inversely related to socioeconomic status as measured by father's occupation."

Looking at site location, may provide an answer to the discrepancy. This study found the lowest level of stress was at the rural sites which also had the highest percentage of free/reduced lunches. Mullins study was done in a Midwestern city. The factor which would cause the discrepancy could be the rural community acting as a stable extended family.

Research Question 8

Is there a difference in building climate based on socioeconomic status?

According to the General School Climate Factors, the perception of the building climate by teachers ranged from a low 71.63 in the school which had 23% of its students receiving free or reduced lunch to a high of 80.20 in the school which had 24% of its students receiving free or reduced lunch.(See Table #29) Using the means of teacher climate levels for each school and the percent of students who received free/reduced lunch, a correlation of .356 (Pearson's r) was found. There is no relationship between teacher climate levels and student socioeconomic status.

Of the two schools with the highest percentage of students receiving free or reduced lunches, one had the

lowest teacher perception of building climate and the other had the highest teacher perception of building climate.

Table 298. Teacher Perception of Climate and Student Socioeconomic Status

72.94	71.63	80.20	76.60	73.00
14%	23%	24%	13.5%	9%

According to the General School Climate Factors, the perception of the building climate by students ranged from a low 63.78 in the school which had 14% of its students receiving free or reduced lunch to a high of 76.06 in the school which had 23% of its students receiving free or reduced lunch.(See Tables #30) Using the means of student climate levels for each school and the percent of students who received free/reduced lunch, a correlation of .378 (Pearson's r) was found. There is no relationship between teacher climate levels and student socioeconomic status.

The two schools with the highest percentage of students receiving free or reduced lunches had the second lowest student perception of building climate and the highest student perception of building climate.

Table #30. Student Perception of Climate and Student Socioeconomic Status

63.78	76.06	64.41	64.52	67.55
14%	23%	24%	13.5%	9%

Discussion

Building climate does not seem to be related to socioeconomic status, but does seem to be related to who the building is for. The school with the highest teacher climate was a building oriented and established to provide for and meet the needs of the adults. The building with the highest student climate was oriented and established to provide for and meet the needs of the students.

RECOMMENDATIONS

Based on the findings of this study and review of the literature, the following recommendations are suggested:

1. Administrators should be trained in stress management techniques and encourage staff and students to learn techniques to reduce and/or handle stress.

2. If an extended family, as evidenced in rural towns, helps to keep stress levels low, then school personnel should work at developing a caring/sharing building atmosphere.

3. Research has shown the building administrator to be a major factor in determining building climate. Therefore, each administrator should implement within their building the eight characteristics that contribute to a positive school climate.

SUGGESTIONS FOR FURTHER STUDY

1. A study of teacher job stress and their perception of building climate to determine if job stress is related to building climate.

2. A study of the relationship between teacher stress and student socioeconomic status.

3. A study of the relationship between student stress and self esteem.

4. A study of the relationship between absenteeism and teacher/student stress.

5. A study of the relationship between student stress and socioeconomic ststus comparing rural, suburban, and urban sites.

6. A comparison study: Is there a difference between the leadership of schools with low stress levels and high stress levels?

7. A comparison study: Is there a difference between the leadership of schools with high building climates and low building climates?

REFLECTIONS

Looking back on this study, several thoughts and questions arise:

1. This study looked for a relationship between teacher stress and building climate, student stress and building climate, and teacher stress and student stress. The correlations were insignificant. Therefore this study shows there is not a relationship between stress and building climate, which seems to be contradictory to most beliefs.

2. As we look at the where we find the low levels of student stress, we may want to try to gain some understanding that may help in the overall alleviation of stress. Students in the rural communities had a lower level of stress than those in suburban or urban schools. The people living in rural communities act like an extended family and adolescents have a greater sense of belonging to the community. Maslow talks about the need for love and belonging and this could be a need that is definitely met through the rural community. Everyone in a small town knows everyone else and there tends to be a sense of family or community.

Suzanne Kobaso in her study of stress said that people who handled stress with low illness had a

commitment/sense of belonging. If this sense or need to belong is optimized in our schools, we would see everyone who comes in contact with a school feels that they belong. This would require a sense of cooperation and team spirit to exist and grow within not only the school but the school neighborhood and even the entire community.

We can best meet our own needs by helping others achieve their needs and goals.

3. Climate is a changing factor from day to day or even week to week. Educational leaders need to develop a culture that runs throughout the school. The culture should expouse the ideals of an effective school and should be believed and followed by everyone that works in, works for or supports the school.

4. With all of our knowledge of stress and its consequences, and the emphasis on wellness, why do school systems fail to provide time for stress reduction and reflection?

5. With the high correlation between student socioeconomic status and teacher stress, assistance is needed for teacher stress reduction when they are working with low socioeconomic students.

6. With all of the stress and stressors present in middle level education, does our day to day curriculum really meet the real life needs of adolescents?

7. As we look at these questions and others that may arise, perhaps we can develop a school program that will prepare our children to meet their real needs of the future.

APPENDIX A

MICHIGAN STATE UNIVERSITY

February 12, 1988

Jerry J. Kelley
309 N. Glassford
Capac, MI   48014

Dear Mr. Kelley:

Subject: "PROPOSAL REGARDING TEACHER AND STUDENT
                  STRESS AND BUILDING CLIMATE"

Investigator: Jerry J. Kelley

The above project is exempt from full UCRIHS review. This
project has been reviewed by another committee member and
approval is granted for conduct of this project.

You are reminded that UCRIHS approval is valid for one calendar
year. If you plan to continue this project beyond one year,
please make provisions for obtaining appropriate UCRIHS approval
prior to February 12, 1989.

Any changes in procedures involving human subjects must be
reviewed by UCRIHS prior to initiation of the change. UCRIHS
must also be notified promptly of any problems (unexpected side
effects, complaints, etc.) involving human subjects during the
course of the work.

Thank you for bringing this project to my attention. If I can be
of any future help, please do not hesitate to let me know.

Sincerely,

John K. Hudzik, Ph.D.
Chair, UCRIHS

JKH/sar

cc: L. Romano

School of Medicine
Department of Psychiatry and Behavioral Sciences, RP-10

December 1, 1987

Jerry Kelley
309 N. Glassford
Capac, Michigan 48014

Dear Mr. Kelley:

I am writing in response to our telephone call today concerning your using the Social Readjustment Rating Scale. Dr. Holmes is pleased to give you permission to use the Social Readjustment Rating Scale in your dissertation.

Sincerely yours,

Pat Burns

Pat Burns, Secretary
to Thomas H. Holmes, M.D.
Professor Emeritus

CENTRAL DAUPHIN SCHOOL DISTRICT
Administrative Offices
600 Rutherford Road
Harrisburg, PA 17109
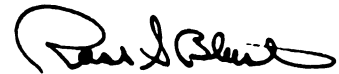
Ross Blust,
Administrative Assistant

Mr. Jerry Kelley
3556 Cloverlawn
Ypsianti, Mich. 48197

Dear Mr. Kelley:

Per your request, I have supplied the General School-Climate survey for use in your research efforts. This letter is to grant permission for you to use the survey in the research which is part of your graduate work. The survey was revised as part of a project at the Pennsylvania Department of Education. As a result you are using the revised form. I hope it will serve you well in your research project.

Sincerely,

Ross S. Blust

CENTRAL PSYCHIATRIC CLINIC

Supported by
The University of Cincinnati
The Hamilton County Community Mental Health Board
United Way & Community Chest

April 24, 1989

Mr. Jerry Kelly
3556 Cloverlawn
Ypsilanti, Michigan   48197

Dear Mr. Kelly:

In response to your request last year, you have my
permission to use our tool, the "Adolescent Life Stress
Event Scale" in your research. We are always glad for
someone to continue testing its efficacy. Good luck in your
research. Please call me if you need further assistance.

Sincerely,

Trena Goodwin, M.S.N., R.N., L.P.C.C.

TG/ch

Patient Care · Education · Research · Community Service

CAPAC MIDDLE SCHOOL

201 NORTH NEEPER
CAPAC, MICHIGAN 48014

JERRY J. KELLEY
PRINCIPAL

PHONE
(313) 395-4321

TO:	Superintendent
FROM:	Jerry J. Kelley, Principal
DATE:	March 1, 1988
SUBJECT:	Doctoral Research Project

Attached are the three survey instruments that I would like
to have completed by teachers and students in Middle
School/Junior High School level of your school district.

Completion time for teachers is approximately twenty minutes,
while completion time for students may be a little longer.

If you have any questions or concerns, please contact me at
395-4321 or at 395-7385 in the evening.

Thank you for taking the time to consider this request.

GOOD MIDDLE SCHOOLS MAKE BETTER COMMUNITIES

March 10, 1988

Dear Parents,

I am conducting an indepth study to determine if there is a relationship between student stress and building climate. Your child has been selected to participate in this study.

The two surveys that your child will be asked to complete, The Adolescent Life Change Events Scale and the General School Climate Profile, will be given during school hours and should take approximately 15 to 20 minutes to complete. Completion of the survey will be done at a time that will not interfere with his/her education.

Anonymity and confidentiality is utmost in my mind, therefore there will be no names or questions asked that will allow us or anyone to identify your child's survey from any other in the building.

If you have any questions concerning this survey, please feel free to contact me during the day at 395-4321 or in the evenings at 395-7385.

Sincerely,

Jerry J. Kelley

Please detach and return to the school office by March 18th.

    My child,_____, has my permission to complete the Adolescent Life Change Events Scale and the School Climate Profile Instrument for Jerry J. Kelley.
    I understand that my child is not required to answer questions that will allow anyone to identify him/her.
    If I am interested in receiving results of the survey, I will include my address and zip code so that results can be mailed to me.

                    _____
                    Signature of Parent or Guardian

                    _____
                    Signature of Child

APPENDIX B

SOCIAL READJUSTMENT RATING SCALE*

DIRECTIONS: If you have experienced the stated event within the last year, mark yes. If you have not experienced the stated event within the last year, mark no.

EVENT	YES	NO
1. Death of spouse	( )	( )
2. Divorce	( )	( )
3. Marital separation	( )	( )
4. Jail term	( )	( )
5. Death of close family member	( )	( )
6. Personal injury or illness	( )	( )
7. Marriage	( )	( )
8. Fired at work	( )	( )
9. Marital reconciliation	( )	( )
10. Retirement	( )	( )
11. Change in health of family member	( )	( )
12. Pregnancy	( )	( )
13. Sex difficulties	( )	( )
14. Gain of new family member	( )	( )
15. Business readjustment	( )	( )
16. Change in financial state	( )	( )
17. Death of a close friend	( )	( )
18. Change to different line of work	( )	( )
19. Change in number of arguments with spouse	( )	( )
20. Mortgage over $10,000	( )	( )

21. Foreclosure of mortgage or loan........(   )........( )

22. Change of responsibilities at work.....(   )........( )

23. Son or daughter leaving home..........(   )........( )

24. Trouble with in-laws...................(   )........( )

25. Outstanding personal achievement.......(   )........( )

26. Spouse begin or stop work..............(   )........( )

27. Begin or end school...................(   )........( )

28. Revision of personal habits...........(   )........( )

29. Change in living conditions...........(   )........( )

30. Trouble with the boss.................(   )........( )

31. Change in work hours or conditions.....(   )........( )

32. Change in residence...................(   )........( )

33. Change in schools.....................(   )........( )

34. Change in recreation..................(   )........( )

35. Change in church activities...........(   )........( )

36. Change in social activities...........(   )........( )

37. Mortgage or loan less than $10,000.....(   )........( )

38. Change in sleeping habits.............(   )........( )

39. Change in number of family
    get-togethers.........................(   )........( )

40. Change in eating habits...............(   )........( )

41. Vacation..............................(   )........( )

42. Christmas.............................(   )........( )

43. Minor violations of the law...........(   )........( )

*Social Readjustment Rating Scale is used with permission
from Dr. Thomas H. Holmes, University of Washington.

THE ADOLESCENT LIFE CHANGE EVENT SCALE*

Directions: If you have experienced the stated event within the passed year, mark yes. If you have not experienced the stated event within the last year, mark no.

EVENT   YES   NO

1. Going to a new school...................(___)........(___)

2. Family member (other than self) having trouble with alcohol....................(___)........(___)

3. A Parent dying............................(___)........(___)

4. Failing one or more subjects in school.(___)........(___)

5. Quitting School...........................(___)........(___)

6. Close friend dying........................(___)........(___)

7. Getting badly hurt or sick..............(___)........(___)

8. Trouble with teacher or principal......(___)........(___)

9. Parent or relative (other than self) getting very sick.......................(___)........(___)

10. Being arrested by the police...........(___)........(___)

11. Hassling with brothers and sisters.....(___)........(___)

12. Having problems with any of the following: acne, overweight, under- weight, too tall, too short............(___)........(___)

13. Losing job................................(___)........(___)

14. Breaking up with a close boyfriend or girlfriend..............................(___)........(___)

15. Losing a pet..............................(___)........(___)

16. Brother or sister dying.................(___)........(___)

17. Close girlfriend getting pregnant......(___)........(___)

18. Parent losing a job......................(___)........(___)

19. Hassling with parents...................(___)........(___)

EVENT	YES	NO
20. Getting into drugs or alcohol..........(___)........(___)		
21. Flunking a grade in school.............(___)........(___)		
22. Moving to a new home...................(___)........(___)		
23. Parents getting divorced or separated..(___)........(___)		
24. Change in appearance such as braces or glasses...............................(___)........(___)		

*The Adolescent Life Change Event Scale is used with permission from Trena Goodwin, M.S.N., University of Cincinnati.

GENERAL SCHOOL CLIMATE FACTORS*

DIRECTIONS: Mark what is appropriate for your school.

1. Teachers treat students with respect..(__).(__).)__).(__)

2. Teachers from one subject area or
   grade level respect those from other
   subjects areas.........................(__).(__).(__).(__)

3. Teachers in this school are proud to
   teachers...............................(__).(__).(__).(__)

4. Students feel that teachers are
   "on their side".........................(__).(__).(__).(__)

5. Students can count on teachers to
   listen to their side of the story
   and to be fair..........................(__).(__).(__).(__)

6. Teachers trust students to use good
   judgement...............................(__).(__).(__).(__)

7. Students are enthusiastic about
   learning................................(__).(__).(__).(__)

8. Attendance is good; students stay away
   only for urgent and good reasons.......(__).(__).(__).(__)

9. Teachers like working in this school..(__).(__).(__).(__)

10. I feel that my ideas are listened to
    and used in this school................(__).(__).(__).(__)

11. Important decisions are made in this
    school with representation from
    students, faculty, and administration.(__).(__).(__).(__)

12. When all is said and done, I feel that
    I count in this school.................(__).(__).(__).(__)

13. Teachers in this school seek better

ways of teaching and learning.........(__).(__).(__).(__)

14. Students feel that the school program
    is relevant to their future needs.....(__).(__).(__).(__)

15. The school supports parent involve-
    ment. Opportunities are provided
    for parents to be involved in
    learning activities and in examining
    new ideas.............................(__).(__).(__).(__)

16. Students would rather attend this
    school than transfer to another.......(__).(__).(__).(__)

17. There is a "we" spirit in this school.(__).(__).(__).(__)

18. New students and faculty members
    are made to feel welcome and part
    of the group..........................(__).(__).(__).(__)

19. When a problem comes up, this school
    has procedures for working on it......(__).(__).(__).(__)

20. When a student comes along who has
    special problems, this school works
    out a plan that helps that student....(__).(__).(__).(__)

21. New programs are adapted to the
    particular needs of this community
    and this school.......................(__).(__).(__).(__)

22. There is someone in this school that
    I can talk to about problems..........(__).(__).(__).(__)

23. The principal really cares about
    students..............................(__).(__).(__).(__)

24. I think people in this school care
    about me as a person; are concerned
    about more than just how well I
    perform my role at school (as a
    student, teacher, parent, etc.).......(__).(__).(__).(__)

* GENERAL SCHOOL CLIMATE FACTORS is used with permission from
Ross S. Blust, Pennsylvania Department of Education.

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