This study examined the question: Do teachers who work in a more supportive educational environment exhibit less burnout as measured by the teacher burnout questionnaire than do teachers who work in a less supportive educational environment? Subjects were 22 teachers (100%) from an elementary school serving an urban university faculty client group (more supportive) and 19 teachers (80%) serving an inner-city populace (less supportive). A review of selected literature presents findings from studies on teacher burnout and its causes, as well as abstracts of four recent dissertations on school characteristics and teacher burnout. Data analysis from this study indicated that teacher burnout exists regardless of environment, whether supportive or nonsupportive. Recommendations are made on the desirability of inservice workshops designed to develop teacher self-worth and on the value of released time for teachers. The questionnaire is included. (21 references) (JD)
TEACHER BURNOUT IN DIVERSE ELEMENTARY SCHOOL ENVIRONMENTS

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Introduction

Many teachers begin their careers with a high energy level, desirous of making their subject matter exciting to their students and demonstrating that they genuinely care for them. However, professional disillusionment, accompanied by fear, insecurity, and anxiety, is replacing the joy of teaching. This condition gradually becomes more serious the longer a teacher works, and it becomes acute after a teacher has taught for a decade or more (Campbell, 1983). This negative condition is teacher burnout, which results from stress, tension, and anxiety in its victims. Burnout is caused by various problems that plague teachers, who receive little help in dealing with them. Data (National Education Association, 1979) revealed that one-third of the teachers it polled said that they would choose another career if they could start over again. Several issues of educational journals have been devoted to and/or addressed the problem of teacher burnout, suggesting that the problem is indeed widespread and an area of concern (Muse, 1980; Gold, 1985; Eskridge and Coker, 1985) within the profession.

Do teachers who work in a more supportive educational environment exhibit less teacher burnout as measured by the Teacher Burnout Questionnaire than do teachers who work in a less supportive educational environment? This researcher made the following assumptions: (1) the responses of teachers on the Teacher Burnout Questionnaire accurately reflect their beliefs concerning teacher burnout, and (2) the educational environment of the university campus, containing parental input, professional opportunities to try new teaching strategies and to serve as an instructional leader, accurately reflects a supportive educational environment.

The hypotheses developed for investigation in this study were:

**Hypothesis 1:** There is no significant difference in teacher burnout between the target schools as measured by the Teacher Burnout Questionnaire.

**Hypothesis 2:** There is no significant difference among teachers within a given target school with regard to teacher burnout as measured by the Teacher Burnout Questionnaire.
The following terms were defined for use in the study:

Teacher burnout - a condition in which one constantly gives more than he gets and which results in a total loss of energy for teaching.

Stress - a non-specific response of the body to demands placed on it. Excessive amounts of stress lead to burnout.

Supportive educational environment - a setting for teaching in which one is expected to become an integral part of decision making and where one is constantly expected to try out new teaching strategies and methods. Learning is viewed as an engagement in worthwhile activity.

Non-supportive educational environment - a setting for teaching in which one is expected to teach but has little or no input regarding decision or curricular matters. Learning is viewed as an absorption of facts taken from the textbooks. Teachers exert minimal effort in understanding their students.

To test the hypotheses, two groups of teachers from different educational environments were compared on the Teacher Burnout Questionnaire through teacher responses. Using these responses as a measure of teacher burnout is consistent with practices described in the literature (McGuire, 1979; Cassel, 1984; and Warneth and Shelton, 1976).

Review of Selected Literature

Burnout is more frequently found among people who work in a helping profession. Gold (1985) stated that some of the symptoms of burnout are similar to those of depression; that is, feelings of hopelessness, helplessness, emptiness, and sadness.

The following are characteristics of burnout or its effects: a reaction of the nervous system to stress, leading to a variety of physical diseases; disruption of personal or professional life as a result of occupational stress; destructive feelings of emotional stress as a result of ineffective coping; loss of concern about and detachment from those with whom a person works; and a cynical and dehumanized perception of students, accompanied by a deterioration of the quality of teaching (Block, 1977 and Maslach, 1978). The ultimate, tragic response of a teacher unable to cope well with...
stress and battling recurring physical and/or mental illness is termed teacher burnout (Fielding and Gall, 1982). A teacher who experiences burnout faces a career crisis characterized by deterioration of teaching effectiveness, personality changes, and, often, abuse of alcohol or drugs, or abandonment of the profession (Cardinell, 1980).

In 1980, the president of the National Education Association stated that:

Our society can ill-afford the large number of teachers who are leaving the teaching profession each year because of symptoms of burnout. The National Education Association is trying to get teacher burnout the attention it deserves to bring about community understanding of stress related problems teachers face. . . . only six out of every ten teachers said they planned to remain in teaching until retirement; and the number of teachers with 20 plus years of experience had dropped by almost half over the preceding 15 years. (McGuire, 1980).

He also stated that:

The dynamics of our society and increased public demands on education have produced adverse and stressful classroom and school conditions have led to increased emotional and physical disabilities among teachers and school personnel. (McGuire, 1980).

Causes of Teacher Burnout

Recent literature from several educational journals, such as Instructor, stress some burnout-related problems, such as school vandalism, disruptive transfers, demanding parents, oversize classes, excessive paperwork, too many tests, inadequate salaries, poor organizational structures, work climate, and inadequate professional training (Warneth and Shelton, 1976). These causes, and a multiple of many others, were supported and elaborated on by Beth Bimes, former National Teacher of the Year, 1980-81, in a personal interview.

Educators should take a closer look at two of these problems, violence and vandalism, because they may be major contributors to teacher burnout. Physical assaults against teachers are increasing. According to NEA's nation-wide teacher opinion poll (McGuire, 1979), an estimated 110,000 teachers - 1 out of every 20 - were physically attacked by students on school property during the 1978-79 school year. The 110,000 victims represent an increase of 57% over the estimated 70,000 teachers who were attacked during the 1977-78 school year. Of the teachers who were attacked, an
estimated 11,500 required medical attention for physical injuries, and an estimated 9,000 required medical attention for emotional trauma. Ten percent of all respondents thought it likely that they would be physically attacked sometime in the near future. Teachers in the northeast, in city systems, and in large school systems expressed this fear more often than teachers generally.

In addition to fear of physical attacks, about one-fourth of the respondents reported they had had personal property stolen during 1978-79. About the same proportion said they had had personal property damaged at school. It has been stated that fear, insecurity, and anxiety are replacing the joys of teaching. Too many teachers are feeling the effects of burnout and being ignored: they want to teach. They want their classrooms to crackle with excitement, but they face too many students who will not do their homework and too many parents who say they cannot control their childrens' home study habits. They face many school boards who cut supplies and equipment from the budget and far too many supervisors who say "live with it" when teachers try to get special help for a disruptive child (McGuire, 1980).

**Discipline**

The discipline problems in the school are major reflections of similar discipline problems in both the home and school. Here the basis is laid for increased discipline problems in the future. Parents need to become involved on a continuing basis in both planning of programs and activities to help improve student discipline and participating in a continued feedback in relation to progress in the future (Cassel, 1984). They also need to give more support for home assignments.

**Homework Support**

Too often, students receive home assignments related to the planned learning program but return without completing them. Learning cannot be a part-time exercise for the teenager if excellence is to be expected in school programs. Parents must pay more than "lip" service to their childrens' preparation. This does not mean that the home becomes the school but that there is active and effective cooperation present (Cassell, 1984). Teachers are asking for more cooperation between the school and home.
Absence of Effective Home Cooperation

Many schools today lack any semblance of a functioning Parent Teacher Association or similar groups that provide full cooperation between the school and the parents. The teacher sees the parent only when there is a problem (Cassel, 1984). Warneth and Shelton explored another area that contributes to burnout. They looked at inadequate teacher preparation; society is also looking at this problem.

Inadequate Teacher Preparation

Cassel and Warneth and Shelton support the idea that inadequate teacher preparation plays a part in or causes teacher burnout. Cassel also thinks that ineffective administration plays its part in causing burnout. They say that many times teachers are not prepared for the teaching situations they encounter. Sometimes they are asked to teach in other areas of concentration for which that they were not trained; for example, in the use of the computers not the teaching of exceptional students. This has to do with the expectations of the teacher on one side and preservice training on the other (Cassel, 1984).

When one examines the personal problems of the teacher, who is considered to be the nucleus from which learning is expected to spring, teacher training and preparation are questioned. Throughout the nation, where improved learning through the use of technology is being used, for example, computer literacy in our schools, more often than not, some students know more about how to use the computer than teachers do. This has caused a frustrating experience for the teacher: to have such positive tools to promote change but with little or no preparation to use them effectively. Another frustrating encounter is to introduce a new curriculum to the school system that has been prepared by an external source and that is unrelated to present curriculum being utilized (Cassel, 1984). Other problems, such as class size and salary, were discussed by Maslach.

Focus of Financial Reward

The notion that increased salary for teachers, or more money for instruction, will create a better school serves only to place the focus for attention on money as opposed to learning by students.
(Maslach, 1978). Most teachers typically begin their careers with a high energy level, being desirous of making their subject matter exciting to their students, thereby demonstrating to them that they genuinely care for them as individuals. However, professional disillusionment, accompanied by fear, insecurity, and anxiety, has often replaced the joy of teaching. This condition gradually becomes more serious the longer a teacher works, and it becomes acute after a teacher has taught for a decade or more (Campbell, 1982). Another problem has been class size.

Focus on Class Size

There is little evidence to support the notion that a teacher does not do so well with 35 students than with fewer, but the focus seems to be on the size of class as opposed to real and effective elements related to learning. This does mean that a teacher in composition, for example, can be expected to correct the homework for an increased number of students. This can cause stress and will diminish or lessen the amount of teacher time for individual help or assistance. Many students need this individualized time and help in order to progress satisfactorily. If the teacher does not have the time when needed, frustration and stress may occur.

Several problems and supportive research about them have been presented about why they are considered to be related to or causes of teacher burnout. The larger question still remains, "Why do teachers burn out?" Researchers decided to interview classroom teachers to get their views on why our nation's teachers are burned out (Instructor, 1979, and McGuire, 1979). One was Marvis Brown, Assistant Professor of Early Childhood Education, University of Richmond, Virginia, who said that "The kids are apathetic. Then, too, there is no reinforcement for creative teaching. The system does not reward good teaching." John Sullivan (Muse, 1980) answered, "Why? Increasing paperwork, minimum competency tests, the new handicapped laws, and a lack of support from the home. The real priorities in education keep changing." Further, he stated that a person can only get "up" for change so many times.

According to Con Robers (Instructor, 1979), teacher-writer in Milwaukee, Oregon, "Maybe it's just your age. You're not getting older, you're getting better." In looking at adult life cycles
and the effects they have on teachers, he added, "If you’re in your fifties, cheer up. That’s the most satisfying state of all." Through what stages does a teacher grow?

General stages of growth for the teacher have been highlighted in ten-year periods that began with the teacher in her "terrible twenties," a period of idealism and impatience (Instructor, 1979). Change must be quick, but without the experience to provide a workable basis for ideals. There is a contradiction that may lead to impetuous behavior regarded by authority figures as rebellious and by adolescents as patronizing. Young teachers are caught in a bind: they are too young to identify with their colleagues, but too old to identify with their students. They suffer from isolation and feelings of nonacceptance.

The thirties is a transition period for teachers during which time students seem to be remote. Teachers may begin to feel that their career choice was wrong. In their late thirties, they became "system people," and the energy they may have expended in trying to change things now is used up in overtime, deadlines, and upward mobility. During their forties is when teaching loses its challenge. The 40-year-old knows the rules and the game. Life is predictable, change is opposed, and ideals are romantic. In their fifties there is a sense of total self-acceptance and tolerance for others. Teachers in this age group can afford to be philosophical; they are the survivors. School systems depend largely on the 50-year-olds. They are the master teachers, emotionally stable and in harmony with their environment (Instructor, 1979).

In an interview with Beth Bimes, she stated what she thought were major causes of teacher burnout:

1. Lack of support of the teachers by society, and the attitude, if you can't do anything else, you can teach. To a person who is very productive, this can be very devastating. 
2. A changing value system. Education is not so valued as it once was. Society no longer views education as a key to upward mobility. 
3. Schools do not work on the value system, because it is difficult to deal with the value of the dollar. 
4. Changing from Judeo-Christian values. Today's society wants immediate gratification and does not see the value of delayed rewards. The student is part of this value system. 
5. We live in a materialistic society; charism and education are non-important. 
6. The concept of society toward teachers is negative (Bimes, 1980).
Society's Perception of the Teacher

Society is telling the educators what they should accomplish. If educators had the courage to be true educational leaders and establish themselves, they would not follow this direction. Teachers are a social bandage expected to cure all the ills for society.

The above concept has been further discussed in an article, "How We Create Stress" (Selye, 1974). He says that we live in a competitive society where we define winners and losers, which causes people-to-people threats, and that usually causes stress. Everyone seems to be threatened by new technology, newly-found freedoms for women and children, and the increasing influence of racial minorities that brings new responsibilities. People long for the opportunity to be creative, but creativity is not always welcome in an industrial society. This also threatens everyone. The jet age that implies we must hurry, get where we need to go fast, do what we need to do fast, causes us to rush when there is no need to. Government, values needs, and desires have all changed, and changes are threatening. Any change brings about stress (McGuire, 1979).

Values and Beliefs

Selye suggests that one major source of stress arises from a "dissatisfaction with life" and, more specifically, from "disrespect from one's own accomplishments." Most people find that a little success in life will help tremendously. People want their lives to make a statement; when it does not, a feeling of worthlessness may develop, bringing on stress. Because this stress induces what society places so much emphasis on, ambition and status, acquisitions such as money, power, and recognition give a sense of worth and security (Selye, 1974).

As a result of these many problems afflicting the teaching profession and causing burnout, the NEA decided to respond and suggest ways to combat this negative condition. The 1980 NEA Representative Assembly adopted the following resolution:

E-42. Stress on Teachers and Other School Personnel

The National Education Association believes that the dynamics of our society and increased public demands on education have produced adverse and stressful classroom and school conditions. These conditions
have led to increased emotional and physical disabilities among teachers and other school personnel.

The Association urges its local affiliates, in cooperation with local school authorities, to develop stress management programs that will facilitate the recognition, prevention, and treatment of stress-related problems.

The Association further urges that the harmful effects of stress on teachers and other school personnel be recognized, and it demands procedures that will ensure confidentiality and treatment without personal jeopardy (Muse, 1980).

Recent Dissertations

Study One

A dissertation of importance was labeled "An Investigation of Teacher Burnout in the Pittsburgh Public Schools" (Vayda, 1982). One hundred twenty-six teachers responded to the Maslach Burnout Inventory at the end of the 1980-81 school year and provided the data necessary to investigate the exhaustion, depressionalization, and personal accomplishment. Information extracted from the study provided a profile of the middle school teacher, 30-49 years of age, with either a bachelor's degree plus additional credits or a master's degree and additional credits. The comparison of correlation coefficients in testing the subscale relationships revealed findings similar to that of Maslach (1978) and Vayda.

The above study was similar to the researcher's in that the topic and the purpose were basically the same. Both studies investigated teacher burnout in a public school setting and both identified causes of burnout. The norms established by this study will closely compare with those established by the Maslach Burnout Inventory.

Vayda's work varied from the researcher's study in that it provided a typical profile of a burnout teacher. For example, it was a female Caucasian, middle school teacher, giving the range of age as 30-49, and rough estimation of educational degree and hours plus. Another difference was in the analysis of data: it used a comparison of correlation coefficients in testing the subscale relationship and it also revealed findings similar to those of Maslach, whereas the researcher's data were analyzed using the t test to determine the significance of the means at the .05 level.
Study Two

Another study was done on "Stress Symptoms and Administrative Style of Urban School Administrators" (Dillihunt, 1986). She says that stress is a factor that has affected school administrators since the inception of organized education. This study was conducted to determine what relationship existed between stress levels of administrators and the effects of practiced administrative style. Several theories of stress were presented, and stressors and consequences of stress were identified. Coping strategies were also reported. Data for the study were collected from a large urban school system where the respondents served in special administrative capacities. Survey responses were collected through a mailed questionnaire sent to private offices.

Six factor analysis of variance tests were used to determine the extent of relationships that might exist between the independent variables and dependent variables. The test of independence means was applied to present differences in stress levels of administrators with Type A and Type B personality characteristics.

She found that no significant relationship or correlations existed between task-oriented and relations-oriented administrative style and stress levels. There were significant differences, however, between administrators with Type A and Type B personality characteristics when compared by total stress level scores. The findings indicate that school administrators do not typically experience inordinate amounts of stress to the extent that stress levels are threatening to physical and psychological health.

This researcher found the above study to be somewhat related in that it approaches the stress of an administrator, and the researcher's study looks to see if burnout exists among the teachers in particular school settings. Also, stress is the leading factor of burnout. It is quite different from the researcher's study in that it looks at stress symptoms and administrative styles to determine what relationship exists between stress levels of administrators and the effects of practical administrative style.
Study Three

Another study, "Stress and Burnout in the Teaching Professional: A Programmatic Intervention (Job Enrichment, Development)" (Panzer, 1984), addresses the issue of teacher burnout at the high school level. The literature indicates that teacher burnout has increasingly become a national problem. It further states that teachers are plagued with a variety of stresses that are immersed in an isolating profession that permits very little assistance in coping with or resolving the sources of these stresses. This study uses a systematic problem-solving method of program development and identifies the stress-related needs of the teachers in the schools under study and proposes an arrangement of programs to meet those needs.

The researcher found the above study to be similar in regard to the literature, which referred to teacher burnout as increasingly becoming a national problem, and how teachers are plagued with a variety of stresses. The literature review is similar to the type used in this study.

Panzer's study also lends itself to the recommendation section of the researcher's study in that it identifies the stress-related needs of the teachers in the schools and proposes an arrangement of programs to meet those needs. The programs proposed are varied in their purposes, goals, and activities. It is different in the following ways: (1) the study addresses the issue of burnout at the high school level, (2) it is a programmatic intervention (job enrichment, development), and (3) it not only decides how the various programs should be implemented to combat teacher burnout, but also how they should be evaluated.

Study Four

Another dissertation was on "Teacher Stress and Burnout: A Historical Review and Synthesis of the Literature and the Development of an Inservice Model" (Walton, 1982). Its purpose was to (1) review and synthesize relevant literature on teacher stress and burnout, (2) develop an inservice model for managing teacher stress and combating teacher burnout, and (3) suggest methods for implementing the inservice model. The study was developmental in nature rather than empirical, drawing on teacher surveys and the developmental literature on teacher
stress and burnout as well as the work of leading scholars in the area of stress and burnout and the literature on inservice teacher education.

Panzer's purpose is quite similar to this researcher's objectives. This researcher reviewed and synthesized relevant literature on teacher burnout and stress, developed an inservice model for managing teacher stress and combating burnout, as well as drew upon teacher surveys and the developmental literature on teacher stress and burnout. This researcher also looked at the work of leading scholars in the area of stress and burnout. Much of the relevant literature used Panzer's study was also supported in the researcher's review of the literature, such as "Teacher stress is currently a critical concern of educators," as stated in both of the writings of McGuire. The researcher used the above abstract as a major source of support for the inservice workshop on combating teacher stress and burnout.

Some of the differences between this study and the researcher's are the following: (1) the above study is an historical review, (2) it is a synthesis of the literature, and (3) it stresses the development of an inservice model. The researcher's study was a descriptive survey study to determine if teacher burnout existed and, if it did, to present ways of combating it. One way was to develop an inservice model, employs a quasi-experimental design in which two groups of teachers are compared on a single variable. The variable is measured one time and is assumed to represent the feeling of the respondents. This type of design is quasi-experimental because the investigator used intact groups with randomness being determined in the selection of the two schools.

Selection of the Sample

The teachers were classified into two groups based on their responses to the questionnaire: one group as exhibiting burnout; one group, as not exhibiting burnout. The sample was obtained by using the entire faculty from two elementary schools. One elementary school had 22 teachers and serves an urban university faculty client group; the other elementary school serves an inner-city populace and has 24 teachers.
The Teacher Burnout Questionnaire was administered by each principal, who was asked to stress that anonymity and secrecy of response would be maintained. The questionnaire has no right or wrong answers but measures the reflections of the respondent at the time of administration. The instrument is marked so that each item is a best representation of the feelings of those responding.

The questionnaire, developed as part of a larger study of teacher characteristics and attitudes toward the profession, has 28 items that are scored on a Likert-type scale from "Strongly Agree" to "Strongly Disagree" (See Appendix A). Items were gleaned from the literature in which characteristics of individuals who exhibit burnout were described. The validity of the instrument is considered as "face validity" because judgments of principals, teachers, as well as literature sources, were used in the developmental process. Reliability of the questionnaire was statistically determined. The responses are valued at 4, 3, 2, and 1, with "Strongly Agree" being 4 and "Strongly Disagree" being 1. The range of scores, theoretically, is 112 to 28; however, the extremes are viewed as "pure types" that are unlikely to occur.

A series of correlation coefficients was calculated using the Pearson product moment correlation formula. The range of the five trials was from .44 to .57, which indicates that the instrument has acceptable reliability. The trials included a split-half test, a test built on even and odd numbered items, and other tests using random starting locations.

Statistical Application

Two statistical techniques were employed in this study. A t test statistic was used to compare responses of teachers from the two elementary schools on the items of the questionnaire as well as to compare response of teachers within a given school. The study used independent samples: that is, two mean scores were compared using total scores on the questionnaire summed upon item scores. Randomly selecting the schools, using the entire sample of teachers within the schools, and reviewing a calculated "t" statistic enabled the investigator to meet the assumptions of the t test. Although the assumptions required for utilization of a parametric statistic were met,
confidence was obtained when a chi-square technique was used on the general responses from the questionnaire. Significance for this study was set at the .05 level of confidence.

Statistical Analysis

The first hypothesis stated that there is no significant difference in teacher burnout between the target schools as measured by the Teacher Burnout Questionnaire. A chi-square test for independence was performed on the 22 teachers from School A and the 19 teachers from School B responses to the Teacher Burnout Questionnaire to determine if burnout was significant in the supportive environment versus the less supportive environment. The observed chi-square statistic was .596 at one degree of freedom. This yields a p value of .440. Therefore, the hypothesis was accepted that there is no significant difference between School A and School B regarding teacher burnout.

The 28 items on TBQ showed no significant difference as a whole when responded to. Therefore, the hypothesis that there was no significant difference in the responses of teachers in Schools A and B to items on the questionnaire was accepted. However, inspections of responses by items on the questionnaire yielded significant differences on five items: parental support, public attack on the school, administrative support, decision making process, and effective internal communication. Table 1 summarizes the comparison between Schools A and B on these variables. Consequently, the hypothesis that there is no significant difference in teacher burnout between target schools as measured by the Teacher Burnout Questionnaire in the area of these variables is rejected.

The second hypothesis stated that there is no significant difference among teachers within a given target school with regard to teacher burnout as measured by the Teacher Burnout Questionnaire.
Table 1

$t$ test Scores and Probability Values for Significant Variables Involving Schools A and B

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>DF</th>
<th>$p$ value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental support</td>
<td>3.09</td>
<td>38</td>
<td>.005</td>
<td>.05</td>
</tr>
<tr>
<td>Sense of public attack on public schools</td>
<td>4.83</td>
<td>39</td>
<td>.005</td>
<td>.05</td>
</tr>
<tr>
<td>Adequacy of administrative support for teachers</td>
<td>3.48</td>
<td>39</td>
<td>.001</td>
<td>.05</td>
</tr>
<tr>
<td>Decision making process between the teachers</td>
<td>3.14</td>
<td>39</td>
<td>.004</td>
<td>.05</td>
</tr>
<tr>
<td>Effective internal communication</td>
<td>3.63</td>
<td>38</td>
<td>.001</td>
<td>.05</td>
</tr>
</tbody>
</table>

Data for a chi-square test for independence performed on 22 teachers from School A to determine if there was significant difference in the number of teachers who responded yes and no to the Teacher Burnout Questionnaire. The observed chi-square statistic was .409. At one degree of freedom, this yielded a $p$ value of .522. Therefore, the hypothesis is accepted.

Four items on the questionnaire were significant within School A: my work contributes to my professional development, my work contributes to my personal happiness, satisfaction with my accomplishments, and looking forward to going to work. Table 2 demonstrates comparisons on the $t$ test.

Data for a chi-square test for independence performed on 19 teachers from School B were analyzed to determine if there was significant difference in the number of teachers who responded yes and no to the Teacher Burnout Questionnaire. The observed chi-square statistic was .211. At one degree of freedom, this yielded a $p$ value of .656, which is not significant at .05. Consequently, the hypothesis that there is no significant difference among teachers in School B as measured by the Teacher Burnout Questionnaire is accepted.
Table 2

$t$ test Scores and Probability Values for Significant Variables of Two Groups within School A

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>DF</th>
<th>$p$ value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>My work contributes to professional development</td>
<td>2.33</td>
<td>20</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td>My work contributes to my personal happiness</td>
<td>2.11</td>
<td>20</td>
<td>.048</td>
<td>.05</td>
</tr>
<tr>
<td>Satisfaction with my accomplishments</td>
<td>2.33</td>
<td>20</td>
<td>.03</td>
<td>.05</td>
</tr>
<tr>
<td>Looking forward to going to school each day</td>
<td>3.48</td>
<td>20</td>
<td>.02</td>
<td>.05</td>
</tr>
</tbody>
</table>

Using a $t$ test, three items were found to be significant: feeling good about myself, feeling threatened by being held accountable for my work, and feeling a strong sense of public attack on my school. Table 3 gives the comparisons between groups within School B.

Table 3

$t$ test Scores and Probability Values for Significant Variables of Two Groups within School B

<table>
<thead>
<tr>
<th>Variable</th>
<th>$t$ value</th>
<th>DF</th>
<th>$p$ value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeling good about myself</td>
<td>2.44</td>
<td>17</td>
<td>.026</td>
<td>.05</td>
</tr>
<tr>
<td>Feeling threatened by being held accountable for my work</td>
<td>-2.12</td>
<td>17</td>
<td>.049</td>
<td>.05</td>
</tr>
<tr>
<td>Feeling a strong sense of public attack on our schools</td>
<td>-3.54</td>
<td>17</td>
<td>.003</td>
<td>.05</td>
</tr>
</tbody>
</table>
Consequently, the hypothesis that there is no significant difference among teachers within a given target school with regard to teacher burnout as measured by the Teacher Burnout Questionnaire in the area of these three variables is rejected.

An open-ended question was asked of all people who indicated that they exhibited burnout to determine the extent to which it occurred. A chi-square goodness of fit was utilized on these responses. A chi-square test for independence was performed on 22 teachers in the supportive environment and on the 19 teachers in the non-supportive environment to the open-ended section of the Teacher Burnout Questionnaire on sometimes and most of the time. Significantly more people in the supportive environment indicated burnout sometimes. There was no significant difference in the burnout of teachers in the less supportive environment.

**Summary of the Study**

The central objective of this study was to determine if teacher burnout existed in School B in a less supportive environment and if there was a significant difference in the existence of teacher burnout as measured by the Teacher Burnout Questionnaire. An initial review of the literature enabled the investigator to design a questionnaire composed of 28 closed items and three open-ended questions.

Based on the concepts of teacher burnout and needed research in education, the following problem, which represented the central objective of the study, was investigated: Do teachers who work in a more supportive educational environment exhibit less teacher burnout as measured by the Teacher Burnout Questionnaire in this study than do teachers who work in a less supportive environment?

The following assumptions were made: (a) the responses of teachers on the Teacher Burnout Questionnaire accurately reflect their beliefs concerning teacher burnout, and (b) the educational environment of the university campus, with parental input, professional opportunities to try new teaching strategies and to serve as an instructional leader, accurately reflects a supportive educational environment.
Two hypotheses were tested in this study. These hypotheses were necessary in order to determine, first, if there was significant difference in teacher burnout between teachers in a more supportive environment and a less supportive environment, and, second, to determine if there was a significant difference in burnout among teachers within a target school as measured by the burnout questionnaire.

A review of the literature indicated that a questionnaire is a very vital instrument in collecting data to determine if teacher burnout exists in a given area or within a target area. The review of the literature and statistical data indicated that the chi-square and t test are both valid and reliable instruments for testing the hypotheses.

The methodology and design utilized a random technique of selecting the schools and a quasi-experimental design in which two groups of teachers within the schools were compared.

Twenty-two burnout questionnaires and cover letters were sent to School A, or the more supportive environment; 22 or 100% of the questionnaires were returned. Twenty-four questionnaires and cover letters were sent in the package to School B, or the less supportive environment; 19, or 80%, of the questionnaires were returned. A t test was used to compare responses of teachers from the two elementary schools on the items of the questionnaire as well as to compare responses of teachers within each school.

The chi-square analysis helped to determine whether a statistical relationship exists between School A and School B. This was done by computing the cell frequencies that would be expected if no relationship is present between the variables, given the existing row and column totals.

Hypothesis No. 1 was tested with the chi-square test for independence performed on 22 teachers for School A and 19 teachers for School B responses to the Teacher Burnout Questionnaire to determine if burnout in either group was significant at the .05 level of confidence. The hypothesis was accepted that there was no significant difference in either group response by items.
Though there was no significant difference in total responses by items between School A and School B, five items were significant when tested on the Teacher Burnout Questionnaire through Hypothesis 1: parental support for teachers, sense of public attack on our schools, involvement of teachers in the decision-making process, adequacy of administrative support for teachers, and effective internal communication. All items were significant at the .05 level, and, therefore, the hypothesis was rejected for each item.

Hypothesis 2 was analyzed with the chi-square test for independence to determine significant difference between the number of teachers in Schools A and B who responded yes or no to the Teacher Burnout Questionnaire. Significance was determined when the level was .05. In each instance, hypothesis 2 was accepted because there was no significant difference between groups in either schools.

Item response for School A revealed significant differences on four items: my work contributes to my personal development, my work contributes to my personal happiness, satisfaction with my accomplishments, and looking forward to going to school each day. All were significant at the .05 level and the hypothesis for each was rejected.

The p value of the chi-square test of teacher burnout in a more supportive environment versus a less supportive environment was not significant.

Data analysis from their study seems to indicate that teacher burnout exists regardless of environment, whether supportive or non-supportive.

Recommendations

This study was designed to generalize from one situation to another. How do various demographic variables, such as sex of teacher, age of teacher, education of teacher, and number of years experience, relate to teacher burnout or to significant items of response on the Teacher Burnout Questionnaire in this study? Would a replication of this study reveal new, significant data about teacher burnout in supportive and non-supportive environments? Would it reveal different significant item by item responses to the questionnaire?
An inservice workshop designed to develop self worth could be used to combat teacher burnout. The goals and objectives of the workshop would be developed by the teachers themselves. The recommendation for an inservice model for teachers for managing stress and burnout was supported in the study on "Teacher Stress and Burnout: A Historical Review and Synthesis of the Literature and the Development of An Inservice Model" (Walton, 1982).

A review mechanism is recommended as a means to combat teacher burnout. This mechanism would be designed in the form of released time for the teacher by the principal at times convenient for the school as well as the teacher.
References


APPENDIX A

TEACHER BURNOUT QUESTIONNAIRE
TEACHER BURNOUT QUESTIONNAIRE

The statements below are based on 28 items to assess specific causes of teacher burnout. Each item has four (4) responses: SA=Strongly Agree, A=Agree, D=Disagree, SD=Strongly Disagree. To the right of each item please check (X) the blank that best represents your response to the statement.

<table>
<thead>
<tr>
<th></th>
<th>I find constructive criticism desirable and helpful.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SA</td>
</tr>
<tr>
<td>2</td>
<td>I engage in leisure time activities adequately.</td>
</tr>
<tr>
<td>3</td>
<td>I feel good about myself.</td>
</tr>
<tr>
<td>4</td>
<td>I look forward to attending professional growth activities.</td>
</tr>
<tr>
<td>5</td>
<td>I feel that my leisure time activities give me a great deal of satisfaction.</td>
</tr>
<tr>
<td>6</td>
<td>I have frequent ailments such as ulcers, migraine headaches, chronic back pains, etc.</td>
</tr>
<tr>
<td>7</td>
<td>I have a close friend at work.</td>
</tr>
<tr>
<td>8</td>
<td>I feel that my work contributes to my professional development.</td>
</tr>
<tr>
<td>9</td>
<td>I feel that my work contributes to my personal happiness.</td>
</tr>
<tr>
<td>10</td>
<td>I feel satisfied with my accomplishments.</td>
</tr>
<tr>
<td>11</td>
<td>I look forward to going to school each day.</td>
</tr>
<tr>
<td>12</td>
<td>I feel that my efforts make a difference in the increasing achievements of my students.</td>
</tr>
<tr>
<td>13</td>
<td>I like my students.</td>
</tr>
<tr>
<td>14</td>
<td>I find that I am in control in the classroom.</td>
</tr>
<tr>
<td>15</td>
<td>I feel that I have good rapport with my students.</td>
</tr>
<tr>
<td>16</td>
<td>I feel that my students like me.</td>
</tr>
<tr>
<td>17</td>
<td>I feel that my classroom management skills are adequate.</td>
</tr>
<tr>
<td>18</td>
<td>I feel that increased divorce rates have made my job more demanding in dealing with follow-up with parents.</td>
</tr>
</tbody>
</table>

SA  A  D  SD
19. I feel that I receive adequate parental support.

20. I feel threatened by being held accountable for my work.

21. I feel that I am meeting the needs of the underachiever.

22. I feel a strong sense of public attack on our school.

23. I feel that my teaching responsibilities are adequate.

24. I feel that we have adequate administrative support.

25. I feel that we have a meaningful reward system for teachers.

26. I feel that we have an effective internal communication system.

27. I feel that we have an effective internal communication system.

28. I feel that we have too many visitations from college students to observe, participate in tutoring programs, student teaching, etc.

Do you feel that you have experienced teacher burnout?

Yes____ or No____. If yes, how frequently? Some of the time ____ Most of the time ____ All of the time ______

25 27