INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

UMI®

The Effects of Exercise, Hobbies, and Social Support
on Teacher Burnout

Katherine Elizabeth Palesch

Department of Educational and Counselling Psychology

McGill University, Montreal

Thesis submitted in partial fulfillment of the requirements for the degree of
MA in Educational Psychology
Specialization in Family Life Education

0-612-64179-1

Canada

ABSTRACT

The primary purpose of this study is to determine if three coping strategies
(exercise, hobbies, and social support) were related to some or all of the three
dimensions of burnout (Emotional Exhaustion, Depersonalization, and Personal
Accomplishment). One humdred and forty-three secondary school teachers from schools
in urban and suburban areas of Eastern Canada participated in this study. The Maslach
Burnout Inventory was used to assess burnout scores and a coping strategies
questionnaire was used to assess participation in activities. Exercise and social support
were positivly related to the Personal Accomplishment dimension of burnout.

RÉSUMÉ

Le but principal de cette étude est de déterminer si les trois stratégies de compensation (l'exercice physique, les passes temps et le soutien social) sont reliées à une ou toutes trois des dimensions de l'épuisement professionnel (épuisement émotif, dépersonnalisation et accomplissements personnels). Cent quarante-huit enseignants, provenants d'écoles en régions urbaines et en banlieue de l'Est du Canada ont participés à cette étude. Le Maslach Burnout Inventory fut utilisé pour évaluer le pointage lié à l'épuisement professionnel tandis qu'un questionnaire sur les stratégies de compensation fut utiliser pour évaluer la participation dans les activées. Les exercices et le soutien social furent liés de façon positive à la dimension des accomplissements personnels de l'épuisement professionnel.

ACKNOWLEDGEMENTS

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

Introduction

Burnout

Burnout is not a new phenomenon. It is suspected to have been around for a very

long time. Maslach and Schaufeli (1993) believe that it existed before the term was

developed in two stories, Thomas Mann's *Buddenbrooks* (1922) and Graham Greene's *A*

Burnt Out Case (1960). In these stories the main characters exhibit symptoms of

burnout. In *Buddenbrooks*, the protagonist displays "extreme fatigue and the loss of

idealism and passion for one's job" (Maslach and Schaufeli, 1993, p. 3) while in *A Burnt*

Out Case "a spiritually tormented and disillusioned architect quits his job and withdraws

into the African jungle" (Maslach, & Schaufeli. 1993, p. 3). These accounts fit in quite

well with current definitions of burnout.

It wasn't until the early 1970s that the concept of burnout was defined. The term

was first coined by psychiatrist Dr. Freudenberger, in 1974, when he noticed that he and

some volunteers he was working with were feeling exhausted and fatigued

(Freudenberger, 1974; Maslach & Schaufeli, 1993). He referred to the dictionary for a

definition and felt that burnout explained what they were experiencing, "to fail, wear

out, or become exhausted by making excessive demands on energy, strength, or

resources" (Freudenberger, 1974, p. 159).

Around the same time Dr. Christine Maslach, a social psychology researcher, was

studying how professionals distance themselves from emotionally charged jobs so that

they can perform their duties. She discovered that this strategy of distancing themselves,

had an effect on the employees' "professional identity and job behavior" (Maslach, &

Schaufeli, 1993, p. 2). When discussing her findings with an attorney, she found that

poverty lawyers referred to the phenomena as 'burnout'. She adopted the term to describe

these symptoms and found that the term was "immediately recognized by (her)

interviewees" (Maslach, & Schaufeli. 1993, p. 2).

Over the past 28 years, many articles have been written on burnout and addressed

a variety of topics regarding its nature and prevention. We know that both the work

environment and the individual's own personal characteristics play a role in burnout.

Supportive work environments can help prevent burnout, while dictatorial ones can

encourage it (Farber, 1991b). McIntyre (1984) and Kyriacou & Sutcliffe (1979) found

that the individual's locus of control influences how well she or he weathers the work

setting (as cited in Kyriacou, 1987). We know that the symptoms of burnout affect a

person's physical and emotional well-being, as well as the behaviours, attitudes and

interpersonal relationships of professionals (Kahill, 1988). Burnout symptoms range from

headaches (Kahill, 1988) and low morale to high absenteeism (Maslach & Jackson,

1981) and negative feelings towards one's job (Kahill, 1988) and clients (Kahill, 1988;

Maslach & Jackson, 1981). Many techniques have been proposed to reduce burnout

ranging from individual interventions such as meditation, proposed by Pearlin &

Schooler (1978) (as cited in Sparks, 1983), to organizational interventions such as

restructuring the workplace (Farber, 1991b).

The majority of articles written between the 1970's and early 1980's are

descriptive (such as Bardo, 1979, and Spaniol, 1979). Unlike the concept of burnout

which has been around for awhile, only after the mid 1980's has well designed empirical research been done to test its validity and to relate its impact on a variety of professional and situational variables. This study attempts to add to the growing empirical research by testing the relationship between coping strategies and the occurrence of three dimensions of burnout.

Research Question

The purpose of this study was to discover if three kinds of personal coping strategies (exercise, hobbies, and social support) were related to one or more of the three dimensions of burnout (Emotional Exhaustion, Depersonalization and Personal Accomplishment). They were chosen because prior research suggests they may reduce some of the factors associated with burnout. Of secondary interest was the relationships between demographic variables (sex, martial status, type of school, and reported stress) and the three dimensions of burnout. Reports of stress were of special interest since stress has had such a wide ranging association, as a complex variable, with burnout. Job stress is seen as being a condition that, if left, can progress to burnout (Maslach & Schaufeli, 1993).

CHAPTER 2

Literature Review

An overview of burnout will be covered in this chapter. First, various definitions,
causes, and symptoms will be examined. Next, the chapter will look at the concept of
burnout, theories, and models of burnout. Then, preventions of burnout will be discussed.
Finally, the rationale for the study will be presented.

Definition of Burnout

There are many definitions of burnout used by researchers. Most of these
definitions can be broken down into three parts. The first part attempts to categorize the
phenomenon, for example calling it a process, or a final stage. The second part mentions
the causes of it, and the third talks about the symptoms. Apart from the fact that many of
the definitions have these three components, there is little consensus regarding what
burnout is. The conceptualizations range from specifying that burnout is a process, a
sequential process, the final stage or endpoint of a continuum of stress, to it being a
psychological syndrome (Cherniss, 1980; Golembiewski & Munzenrider, 1988;
MacBride, 1983; Maslach, 1993; Stephenson, 1990).

There is some consensus about what its causes are. Most experts say that burnout
is caused by stress in one's job, whether it be due to excessive demands of the job, the job
being emotionally draining, or negative stress (Cherniss, 1980; Forman 1982;
Freudenberger, 1974; Pines & Aronson with Kafry 1981; Stephenson, 1990).

The symptoms of burnout vary greatly. The conceptual properties of burnout
include: exhaustion, changes in attitudes, lowered productivity, and treating people in a

depersonalized manner (i.e. treating them as objects) (Cherniss, 1980; Forman, 1982;

Freudenberger, 1974; Golembiewski & Munzenrider, 1988; Kyriacou, 1987; Perlman &

Hartman, 1982; Pines, Aronson, & Kafry 1981; MacBride, 1983; Maslach, 1993).

It should be noted that the above definitions are characteristics of teachers

indentified by students as poor teachers (Aulls, 1998). Therefore, teachers experiencing

burnout are not only professionally at risk but are likely to offer unprofessional teaching

services to students.

Christina Maslach's Burnout Inventory is widely used to measure burnout

(Greenglass & Burke, 1988; Lee & Ashforth, 1990). Her operational definition of

burnout was derived from several years of research involving interviews, surveys, and

field observations of employees in "people-oriented professions" (Maslach, 1993). She

defines burnout as:

> "*a psychological syndrome of emotional exhaustion, depersonalization,*
>
> *and reduced personal accomplishment that can occur among individuals*
>
> *who work with other people in some capacity. Emotional exhaustion*
>
> *refers to feelings of being emotionally overextended and depleted of one's*
>
> *emotional resources. Depersonalization refers to a negative, callous, or*
>
> *excessively detached response to other people, who are usually the*
>
> *recipients of one's service or care. Reduced personal accomplishment*
>
> *refers to a decline in one's feelings of competence and successful*
>
> *achievement in one's work.*" (Maslach, 1993; p. 20-21)

This definition is used in the present investigation. Each of the measures of the three

dimensions of burnout are reliable. Also some supportive evidence exists of the validity

of the scores provided by the measure.

Conditions Associated with Burnout

Conditions reported to be associated with burnout among human service

providers includes teachers and can be divided into two main categories: the **work

environment**, and **personality factors**.

Work Environment Conditions Associated with Teacher Burnout

Within the work environment there are four subcategories that can lead to

burnout. They are: *administration*, *clients* (*students*), *workload*, and *social aspects*. Under

administration, the possible factors affecting teachers and other professionals are: poor

organizational structure (Spaniol, 1979), unclear institutional goals (Cherniss, 1980),

lack of career ladders (Bundy, 1981; Spaniol, 1979), low salary and status (Bundy, 1981;

Kyriacou, 1987), lack of educational resources, financial constraints, large class

enrollments (Forman, 1982), and lack of policy influence (Pines, 1993). These work

environment conditions may manifest themselves in different combinations and degrees

depending on the local work setting. Lack of support from administrators, or working

under supervisors who are burned out themselves can affect teacher burnout (Spaniol,

1979). Add to this the general public's lack of respect for the job teachers are doing

(Kalker, 1984), and we have professionals who are alone, tired, frustrated, and

unappreciated. If all these conditions exist over extended periods of time, this would be

likely to leave teachers vulnerable to feeling exhausted, resentful, and not effective at

their job.

The students are another factor in burnout. Unlike other professionals, teachers are not only responsible for more than one client at a time, the average class size is 30 students (Employer Bargaining Committee for Protestant School Boards), but also have to obtain the cooperation from these clients as they provide services to them. It is the job of the teacher to build social cooperation (Doyle, 1983; 1984) and focus students' attention on learning academic content during each class. This is not an easy task. With compulsory education in Quebec until the age of 16, secondary school students must stay in school even when they are not interested in learning and may even disrupt the teaching process. What wears down teachers the most are the poor attitudes of the pupils towards work (Bardo, 1979; Kyriacou, 1987). It is not dealing with disruptive students, although that is a large concern. In Kyriacou's (1987) review of the literature he suggests that it is the accumulation of stress from the daily battle with students that is most harmful and not the less frequent dealings with disruptive behaviour that can cause burnout.

In reviews of research it has been found that difficulties with students (Kyriacou, 1987) and assaults by students (Walsh, 1979) can wear teachers down. When this category is added with the previous one, some teachers may be stuck between unsupportive administration and reluctant, possibly destructive students.

The third sub-category is workload. The literature mentions several causes that can fit under this heading. There are time demands (Forman, 1982), paperwork pressure (Walsh, 1979), workload (Cherniss, 1980; Kyriacou, 1987), overload (Pines, 1993), role conflict (Kyriacou, 1987), lack of stimulation or boredom (Cherniss, 1980; Freudenberger, 1974) and lack of variety (Pines, 1993). As Dr. Freudenberger noticed, it

is the dedicated people who burnout (Freudenberger, 1974). For dedicated teachers the

workload is not limited to the "office." At the end of the day they leave the school and

still have to correct the homework, tests, and papers that the students hand in, and

prepare for the next day's classes (Cherniss, 1980). It could be palatable if there were

rewards; however, unlike other professions, teaching does not offer a significant career

ladder (Bundy, 1981). Burnout can occur when professionals feel frustrated and helpless

because they are limited in their earning potential (Bundy, 1981; Kyriacou, 1987). This

category paints the picture that some teachers can become overworked and find

themselves in a job routine that they find boring and uninteresting.

The last sub-category under work environment is the social aspect. Teaching does

not lend itself to being a very sociable profession. The person is isolated from colleagues

in his or her classroom with students all day, meeting other teachers only infrequently

and for short periods of time. This time is further reduced when the teacher is required to

supervise students for social, extracurricular, sports or even detention activities during

his or her "free time". This isolation is one of the factors that can lead to burnout

(Cherniss, 1980; Spaniol, 1979; Walsh, 1979). Any strained relationships with colleagues

or administration are bound to affect the individual because adult social contact is

limited. In addition, problems with supervisors, colleagues or administrators (who could

be burned out themselves) may influence someone burning out, since these are the adults

with whom the teacher interacts the most and on a daily basis (Spaniol, 1979; Walsh,

1979; Kyriacou, 1987; Pines, 1993).

Personality Factors Associated with Teacher Burnout

This category can be broken down into three sub-categories. The first is the *demographic factor*. Characteristics such as sex, age, and years teaching in a particular school have not been shown to be consistently related to burnout (Kyriacou, 1987). However, some studies have found that male teachers tend to depersonalize more than female teachers (Greenglass, Burke & Ondrack, 1990; Greenglass & Burke, 1988; Berg, 1994; Byrne, 1989b), and younger teachers are more prone to burnout than older ones (Berg, 1994; Byrne, 1989b).

Another factor in this category is *locus of control*. Locus of control refers to a continuum of beliefs about how little or how much control one has over one's life. It ranges from the belief that one has little control over one's life (external locus of control) to the belief that one has a lot of control (internal locus of control). It is the people who have an external locus of control who may be more prone to burnout. There is some evidence that these teachers report more stress and are more stress-prone (Kyriacou, 1987).

The third factor is related to *involvement* in one's job. Dr. Freudenberger (1974) believed that it is those who are dedicated and committed to their jobs who are prone to burning out. These are the people who work long hours with little financial compensation. As he puts it " we work too much, too long and too intensely" (p. 161). It is not only those who are dedicated that are at risk but also teachers who see their job as being essential high self-esteem and personal sense of accomplishment that are more likely to be a victim of burnout (MacBride, 1983).

Other Factors Potentially Associated with Burnout

There is also a situation rather than a condition that can lead to burnout that falls in between the work environment and the personality factors. It is the compatibility between the employee and the job demands. Occupational stress can stem from a poor fit between the demanding facets of the job and the capabilities of the individual (MacBride, 1983). This incompatibility can come from inadequate teacher training (Spaniol, 1979; Bundy 1981) in addition to various personality characteristics and work-load demands.

Many and complex conditions or situations may put some teachers at risk of burnout. These conditions have not been clearly delineated to date. The actual number of teachers experiencing burnout is also imprecise but some estimates are as high as 6% internationally. Specifically, Stephenson (1990) found that 6% of his study's population were burned out. Kyriacou (1987) also disclosed that teachers report one of the highest levels of occupational stress but, as Salo (1995) found, school holidays may provide a recovery period which will affect any attempts at assessing the true extent of the problem.

Symptoms of Burnout

In the beginning, when the research on this topic was just starting, the symptoms were few. Dr. Freudenberger (1974) listed several physical signs of burnout, ranging from feelings of exhaustion and fatigue, to headaches and shortness of breath. He also listed behavioral signs such as quickness to anger, feelings of being overburdened, increased risk-taking, and excessive use of narcotics. A few years later Dr. Bloch (1978)

and Dr. Maslach (1977) listed this as one of the characteristics of being a burned out

teacher: "a cynical and dehumanized perception of students, accompanied by a

deterioration of the quality of teaching" (as cited in Walsh, 1979 p. 253). Ten years later

the number of symptoms had increased more than ten fold, as shown by Burisch (1989),

who found more than 130 symptoms (as cited in Burisch, 1993).

Kahill (1988) reviewed 65 empirical articles published between 1974 and

December 1984 that focused on symptoms of professional burnout. She found that the

symptoms could be grouped into five categories: physical, emotional, behavioral,

attitudinal, and interpersonal. In the following paragraphs each category will be

explained with a list of the symptoms that Kahill (1988) has found to be empirically

linked to burnout, and the authors who have mentioned the same symptom in either

empirical or non-empirical articles.

Professionals have been found to complain of physical symptoms ranging from

fatigue to physical diseases (Greenglass, Burke, & Ondrack, 1990; Kahill, 1988; Spaniol,

1979). Examples of some of the complaints are head aches, colds & flu, sleep

disturbances, and gastrointestinal problems (Kahill, 1988). The range of significant

correlations linking burnout to health or physical condition range from - 0.16 to - 0.44.

While these are not strong correlations they are, none-the-less, not to be ignored.

A wide range of emotions, as well, fall into the emotional category. Some

examples are anxiety and depression (Greenglass, Burke, & Ondrack, 1990; Kahill,

1988), helplessness and low morale (Kahill, 1988), irritability (Kahill, 1988; Spaniol,

1979), and guilt (Kahill, 1988; Stephenson, 1990). Anger (Garte & Rosenblum, 1978;

Kahill, 1988) is a symptom that Kahill lists in her article but more recent research does not support a link to burnout. Stephenson (1990) found that burned out teachers reported almost the same level of anger as healthy or worn out teachers. Kahill (1988) herself wrote that the strongest link is between depression and burnout. The other emotional symptoms need further study to be conclusive.

Under the behavioural heading comes the personal and work habits of the employee. Behaviours such as drug and alcohol use increase as the person burns out, as does smoking and theft (Kahill, 1988). Burnout and high absenteeism may be linked, but Kahill (1988) has found mixed results for this relationship. There is, however, a correlation between burnout and turnover, and burnout is related to a deterioration in the quality of service provided (Kahill, 1988).

Kahill (1988) includes job satisfaction in the attitude category but her literature review was inconclusive as to whether it was a symptom or a cause of burnout. She reported correlations between job satisfaction and burnout ranging from - 0.17 to - 0.87 with the majority falling between - 0.40 and - 0.59. Since Kahill's article Wolpin, Burke, and Greenglass (1991) did a study to determine the role of job satisfaction and found that there is a moderate effect of burnout on job satisfaction and not vice versa indicating that decreased job satisfaction is a symptom of burnout rather than a cause.

The negative attitudes of employees also fall into the attitude category. Cherniss (1980) found a negative change in attitude in his subjects when they burned out, but from what Kahill (1988) lists, Cherniss understated the problem. Kahill (1988) lists 15 negative attitudes ranging from not enjoying one's work to being intolerant and

dehumanizing one's clients. Some of the symptoms Kahill (1988) mentions are cynicism, pessimism, defensiveness, desire to escape from people, callousness, and negative attitudes towards clients. Considering that professional burnout is occurring in the human service industry, these findings are disturbing.

The last category covers interpersonal symptoms and is quite unsettling. Here Kahill (1988) mentions that there are two groups of people who suffer at the hands of the person being burned out. The first is the client. Studies have found that crisis telephone counselors were engaging in inhumane practices, such as " not answering the phone, hanging up on clients, and refusing to conference with families of runaways" (Kahill, 1988; p. 289) and police officers verbally and physically abusing suspects (Kahill, 1988). The employee's family and friends also suffer. The quality of one's personal relations with friends suffers; the person has fewer friends, and the overall quality of family life is reduced, also marital and family problems are more likely to occur (Kahill, 1988). These two groups are the hidden victims of professional burnout.

Burnout is an important problem in our work force. Among teachers, it is especially damaging because of the large number of young people who must spend more time with teachers than other adults in society. It also affects the physical, emotional and attitudinal states of the teachers themselves. What is most bothersome is the effect burnout has on the service the quality and quantity of the students receives. In the human service industry the clients are vulnerable to begin with. This is especially true of teaching where the clients are vulnerable young people. Being faced with a teacher who may be at best indifferent, or at worst abusive will hinder the students' learning and can

cause new problems. In this human service industry, the effects of burnout are obviously

counterproductive.

Burnout as a Concept

Due to the diversity of the definitions, causes and symptoms of burnout, it is

prudent to ask whether it is separate from other related constructs (Maslach & Schaufeli,

1993; Meier, 1984). For example, burnout is related to job stress (Maslach & Schaufeli,

1993), depression (Greenglass, Burke, & Ondrack, 1990; Kahill, 1988) and job

dissatisfaction (Kahill, 1988). How does one distinguish between experiencing job stress

rather than burnout? Some authors argue that it is the context and time frame which

distinguishes the two.

Maslach & Schaufeli (1993) acknowledge these overlaps and suggest that it is

difficult to distinguish between job stress and burnout because they do not have clear cut

boundaries separating them from other concepts; however, it is not impossible to

separate them. Maslach & Schaufeli (1993) feel that the distinction between burnout and

the other concepts such as job stress, depression, and job dissatisfaction is relative. What

separates burnout from job stress is the length of time stress is experienced. What

separates burnout from depression and job dissatisfaction is their contexts (Maslach &

Schaufeli, 1993).

Maslach & Schaufeli (1993) argue that the time frame is important in burnout. It

is considered to be "prolonged job stress" where the demands of the job overwhelm the

employee's resources (Maslach & Schaufeli, 1993, p. 9; Meier, 1984). This drawn-out

time period is implied in the term burnout which refers to the depleting of one's reserves

(Maslach & Schaufeli, 1993). This process is consistent with Selye's (1967) model of general adaption syndrome (Maslach & Schaufeli, 1993). The model consists of three phases: alarm, resistance, and exhaustion. The final stage, exhaustion, occurs after prolonged exposure to stress and results in the individual's resources being drained and irreversible damage occurring. It is the last stage that is parallel to burnout, and the two previous stages can be seen as occurring in response to the job stress (Maslach & Schaufeli, 1993). However Maslach and Schaufeli do not provide empirical evidence that could tease apart the two concepts.

When separating depression from burnout, Maslach & Schaufeli (1993) offer Warr's (1987) explanation that it is the context that makes the distinction. The idea is that depression occurs in any context (that it is context-free) and that burnout occurs in a job-related context. This alone is not enough to differentiate the two concepts, however, Maslach & Schaufeli do provide some empirical findings to support this. The Maslach burnout inventory has the three components: Exhaustion, Personal Accomplishment, and Depersonalization. It is the exhaustion component that is related to depression and not the other two. Because depression relates to only one component of burnout, the two concepts can be considered distinct (Maslach & Schaufeli, 1993).

Job dissatisfaction has similar empirical support for it's distinction from burnout. Maslach & Schaufeli (1993) mention that several empirical studies have found that job dissatisfaction is negatively correlated with the Emotional Exhaustion and Depersonalization scales, but not with Personal Accomplishment. The fact that dissatisfaction is related differently to the three components of burnout supports their

claim that job dissatisfaction and burnout are not the same thing.

It seems that the evidence separating burnout from other concepts such as

depression, stress, and job dissatisfaction is minimal. The field would benefit from

exploring the differences and similarities between burnout and these concepts.

Considering that the body has only a finite number of ways of dealing with stressors that

it encounters, there are bound to be similar responses to burnout and other related

experiences; however, finding support for the unique process of burnout would also help

in devising better measures and treatment.

Theories of burnout

In researching this topic, it was difficult to find any theories of burnout. Many

models are proposed but few provide a theory in which to view the model. Considering

that this study followed Maslach's view of burnout, it is logical to use the theory that best

fits her model. The best theory to provide a context for Maslach's model seems to be the

Conservation of Resources Theory.

Conservation of Resources (COR)

COR (Hobfoll & Freedy, 1993) is a general theory of stress that can apply to

anyone and any situation. The main tenet of this theory is that individuals strive to gain

and protect resources that they feel are important, and stress occurs when these resources

are threatened or denied. Resources can be anything that the individual values or that can

be used to attain things that are valued. These can be money, education, self-esteem,

mastery, belongings etc. There are four kinds of resources: *object resources*, which are

valued for their physical and symbolic status; *conditions*, such as marriage, tenure, and

seniority that can secure resources; *personal characteristics*, that can aide in stress

resistance, and *energies*, such as time, money, knowledge that can be used to acquire

other resources. When these resources are threatened, stress follows. There are three

situations that are threatening: (a) when resources are threatened directly, (b) when

resources are lost, (c) when resources are invested in an endeavor and the expected level

of gains are not received.

One of the key characteristics about burnout is the feeling of exhaustion and of

being overwhelmed by the work load. Hobfoll and Freedy (1993) point out that these

circumstances affect people's confidence about securing resources and protecting

themselves against loss, thus leaving them vulnerable. The authors go on to explain that

only in situations where there is a chance of losing resources, or restricting gains, does

stress ensue. In situations where there is change but resources are gained there is no

stress. The main emphasis is on the idea that loss is primary to stress. The theory predicts

that in times of loss, people strive to minimize the net decrease of resources. When

people are not confronted with loss, they are trying to acquire resources to offset any

future erosion of resources.

For some teachers, this means that if the resources they put into their jobs on a

daily basis do not result in the expected gains, this can cause stress. This can lead to

burnout if it continues over an extended period of time. Research into the causes of

burnout have found situations that can be seen as a potential for loss or a lower level of

gain than expected.

Physical loss can come from assaults by students, which have been cited as one of

the causes of burnout (Walsh, 1979). Financial constraints and lack of career ladders can restrict accumulating resources. Resources can be threatened by government budget cuts, loss or restrictions on obtaining new equipment, and the loss of qualified resource people as they leave for better paying jobs. Situations where gain does not meet expected levels can be seen in the attitudes of underachieving pupils towards school work. Teachers invest hours each day to teach and too many students may show very little effort to learn in return (Bardo, 1979; Kyriacou, 1987).

Interpersonal losses are also relevant since teachers have little time to interact with colleagues and receive emotional support (Walsh, 1979; Bundy, 1981). Any interpersonal conflict is very stressful since social contact is limited and therefore precious. For this reason engaging in negative interactions with parents, dealing with problem children, and receiving negative evaluations by administrators will have a larger impact on the teacher than the little everyday rewards they might receive (Hobfoll and Freedy, 1993).

A heavy workload, where teachers are facing increasing numbers of students in the classroom, time demands, and role conflict, may leave them feeling exhausted. As noted above, these conditions may make teachers more vulnerable to burnout because they feel less secure, with the passing of time, about their abilities to re-acquire resources that have been lost or never made available, to them, as individuals in the workplace.

COR does suggest some strategies for reducing stress. Intervention should be based on increasing resources and reducing vulnerability to loss. The focus should be on acquiring resources, whether it be financial, education, skills etc. Leiter (1990) found that

family resources, work setting resources, and coping style were related to different

aspects of the MBI (as cited in Hobfoll & Freedy 1993). Other research such as Pines &

Aronson (1983) have found that social support, at home and at the workplace, can reduce

burnout (as cited in Farber, 1991; Russell, Altmaier & Van Velzen, 1987).

Models of Burnout

The description of the COR theory was given to provide the reader with a context

in which to view Maslach's model of burnout. Although Maslach's model is the most

predominant in the literature, this chapter will also outline three other models. There are

two kinds of models in the literature: linear and multidimensional. The first three

models, although based on previous research, have not been used by many researchers.

The fourth model, Maslach's multidimensional model of burnout, has been used by many

researchers in North America and abroad (Greenglass, Fiksenbaum & Burke, 1996;

Kantas & Vassilaki, 1997; Salo, 1995).

Perlman and Hartman (1982) created a linear model of burnout after reviewing all

the articles that were written at the time of publication. There are three dimensions: (a)

physical symptoms, which include physical exhaustion, (b) *affective-cognitive*, where the

focus is on attitudes and feelings such as emotional exhaustion, and (c) a *behavioral*

dimension which can manifest itself in lower job productivity and over

depersonalization. There are four stages in this model. The main question of the first

stage is whether the situation is conducive to stress. For example, if there is an

inadequate fit between the employee's skills and what is required for the job, then there is

a good chance that there will be stress. The second stage depends on the individual

perceiving the stress. This will be different for each individual because one's personality and background will affect how one evaluates the stress. A response to stress occurs in the third stage. Stage four is the outcome of the stress. This is where burnout would occur. If the person effectively deals with the stress then he or she ends up back at stage two where he or she would evaluate new stress. If the person engages in ineffective coping strategies, the outcome (burnout or other outcomes) would depend on the personal and organizational variables present at the first stage.

In reviewing all the research up until 1982, the authors managed to capture the essence of burnout in a clear and concise model. Its main strength is its recognition of the influence of personal and organizational variables at each of the four stages, which is vital for any model since burnout cannot occur in a vacuum. There is however, a drawback. The authors did not provide information on how to test or measure this model, and it seems as though other researchers have not pursued it.

Courage and Williams (1987) proposed a three-dimensional model. Based on health service care providers, they propose three dimensions that form a cube; (a) *the care providers* who brings to each situation their own personality characteristics, demographic characteristics, professional status, and expertise, (b) *the human service organization* which provides roles, functions, resources, power or authority, structure, and tasks, and (c) *the care recipient* who brings to the situation complexity of problems, acuity, chronicity, demographic characteristics, and individual behaviors. "A basic assumption of the approach is that an optimal relationship is required among variables within each cell to prevent the occurrence of burnout" (p.19). If one aspect of the cell

changes without compensation in the other aspects, then there is a potential for burnout.
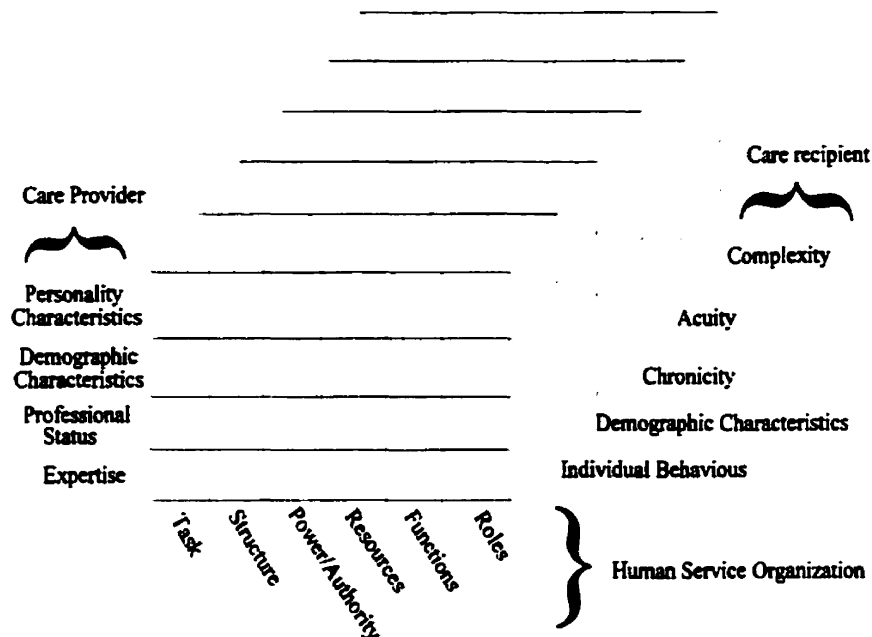
Figure 1. Courage and Williams' (1987) three-dimensional model of burnout.

This model has some of the same problems as the previous one. The authors do not suggest methods of measurement, and after checking the citation index, no other researchers have used this model in their studies. Maslach criticized the model saying that it does not clearly relate the variables to burnout, and that there is no theoretical rationale for putting the dimensions into a cube form (Maslach, 1987). Unlike the Perlman and Hartman model, there is no progression from a healthy employee to one who is burned out. This seems to imply that when one dimension shifts without a compensation from other dimensions, the individual suddenly finds him or herself

burned out. There is no support for this "sudden metamorphosis" in the literature

(Maslach, 1987).

Golembiewski and Munzenrider (1988) propose an eight phase model of burnout

based on Maslach's three dimensions. They divide the scores on Maslach's three

dimensions into High and Low and created combinations of the three dimensions into

eight phases.

Table 1

Golembiewski and Munzenrider's (1988) Eight Phase Model of Burnout

	Progressive Phases of Burnout							
	I	II	III	IV	V	VI	VII	VIII
Depersonalization	lo	hi	lo	hi	lo	hi	lo	hi
Personal Accomplishment	lo	lo	hi	hi	lo	lo	hi	hi
Emotional Exhaustion	lo	lo	lo	lo	hi	hi	hi	hi

(taken from Golembiewski and Munzenrider, 1988, p. 28)

Empirical support comes from a study they did with professionals in a Canadian

organization (71 subjects) over a seven week time period. They found that the

dimensions and the phase model had congruence of scores and they say that knowing

where a person is in the model will help predict what stage he or she will be in at a future

time. As the individual advances from stage I to stage VIII, the variables and covariates

are increasingly negative and the symptoms more severe (Golembiewski and

Munzenrider, 1988). However, people do not have to progress linearly through the stages

I to VIII. There are two basic forms of onset: chronic and acute. In chronic onset a person

can skip stages and move through the phases in the following pattern I to II to IV to VIII

if the work condition gets worse. Or a person may follow the acute onset and progress through the phases as I or II, to V or VI, to VII or VIII. This pattern can occur if a person is responding to a sudden traumatic event.

According to Leiter (1993), this model has some serious limitations. Leiter (1993) outlines these limitations which he discussed in detail in his 1989 article. He writes of how Golembiewski and Munzenrider (1988) modified the MBI by dropping two items and adding three more. Golembiewski and Munzenrider (1988) say that this produces three factors that are grouped into Emotional Exhaustion, Depersonalization, and Personal Accomplishment and that it has support from a factor analysis that was done. However, Leiter (1993) has not found sufficient information on the analysis or the authors' rationale and criteria for defining a factor. They also changed the focus of the inventory to refer to coworkers instead of service recipients. How this will change what the inventory is measuring is unclear (Leiter, 1993). Even the rating scale terms were revised from a frequency rating to one that measures how characteristic the items are of the subject. The rating scale on the MBI is 0-never to 6-everyday, whereas Golembiewski and Munzenrider's inventory's scale is 1-very much unlike me to 7- very much like me.

One of the main criticisms that Leiter has is that this model reduces burnout to a single dimension of Emotional Exhaustion (Leiter, 1993). This can be seen by the ratings given to the first four phases which are low Emotional Exhaustion and the last four (high). The other two dimensions are alternations between low and high. This model also leaves out Maslach's rating of moderate. The problem with having the model based on Emotional Exhaustion is that is has been shown to be strongly correlated to

environmental conditions. So changes in environmental conditions will show up as being

a change in burnout, when it is not necessarily so (Leiter, 1993). This model also reduces

the importance of Depersonalization and Personal Accomplishment. By doing this the

phase model reduces burnout to general occupational stress.

Apart for Golembiewski and Munzenrider (various years) no one else has used

this model in studies. This model differs from the previous two in that its variables can

be measured in a reliable way, and it reduces the possible combinations of the three

dimensions to just eight. Unfortunately, in trying to modify Maslach's model, they appear

to increase the complexity without improving the validity. If one accepts Leiter's (1993)

arguments, their system of phases reduces the validity of their burnout questionnaire

since the validity ratings were based on Maslach's inventory and not the modified

version.

Maslach's model is a multidimensional one. There are 3 dimensions which reflect

different aspects of the burnout phenomenon. *Emotional Exhaustion* represents the stress

variable, while reduced *Personal Accomplishment* looks at an aspect of self-evaluation,

and *Depersonalization* reflects interpersonal relations (Maslach, 1993). Burnout does not

progress from one dimension to another, but is considered a collection of continuous

variables that range from low to high. The three variables are always present in a work

situation and it is only when the scores are high that an individual is at risk of burnout. A

low score of burnout would be reflected in low scores on Emotional Exhaustion and

Depersonalization, and high scores of Personal Accomplishment. A moderate score

would be an average score on all three variables, while a high score of burnout would

entail high scores on Emotional Exhaustion and Depersonalization, and low scores of

Personal Accomplishment.
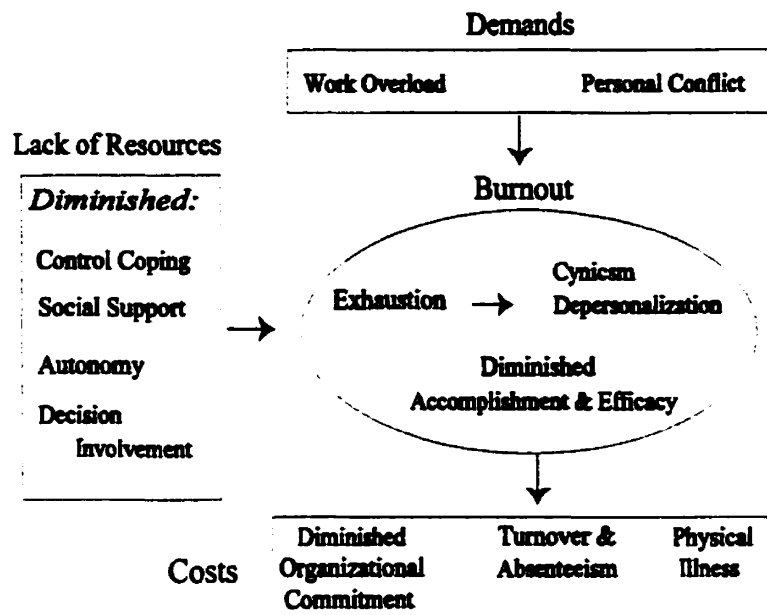
Figure 2. Maslach and Jackson's (1996) Structural Model of Burnout (taken from

Maslach, Jackson, Leiter (1996) MBI manual, p. 36)

In Maslach's model, demands are the main precursors to the exhaustion and

depersonalization aspects of burnout, while the lack of resources is associated with

diminished accomplishment. In the MBI manual the authors explain this model using

examples from the human service work with special emphasis on nursing, but it can be

used for the teaching profession as well. Demands are made up of work overload and

personal conflict. Work overload covers emotional demands, which come from dealing

with recipients who are in pain, distress, or anger. It also represents a major stressor for

teachers and nurses alike. Van Yperen, Buunk, & Schaufeli (1992) identified a lack of

reciprocity from recipients or students as one of the primary difficulties of human service

professions (as cited in Maslach, Jackson & Leiter, 1996).

The second aspect of demands is personal conflict. This refers to conflict between

the teacher and co-workers. Shinn, Rosario, Morch, & Chestnut, 1984 found that

problems with supervisors and colleagues were cited more often than difficulties with

service recipients (as cited in Maslach, Jackson & Leiter, 1996).

Lack of resources encompasses four categories: coping styles, social support,

autonomy, and decision making. When these aspects are impaired, the individual is

vulnerable to burnout. For coping styles, Leiter (1990, 1991a) found that it is the control

oriented coping styles that are favorable and are negatively correlated with Emotional

Exhaustion (as cited in Maslach, Jackson & Leiter, 1996). Social support seems to be

more related to Personal Accomplishment but interpersonal conflict seems to be related

to Emotional Exhaustion. Autonomy and decision making refer to the work setting.

Environments that can reduce burnout are those where employees are empowered (have

input into decisions). Those work settings where employees are undermined, reduce

feelings of accomplishment and increase the tendency of employees to become distant.

The consequences of burnout range from somatic symptoms, such as head aches and

illness, to behavioral problems such as drug and alcohol abuse, absenteeism, high

turnover, and decreased job performance. Teachers can withdraw from the students and

even verbally and physically abuse the students (Kahill, 1988).

Lee and Ashforth (1996) did a meta-analysis of this model and confirmed the

structure and the main features of the model. They were testing associations between various correlates and each burnout dimension. They found that five out of eight demand correlates were strongly associated with Emotional Exhaustion whereas only one out of 18 resource correlates were. This supports the model where demands are seen as precursors to Emotional Exhaustion. They found that Depersonalization was strongly associated with role stress and stressful events (demands correlates). Personal Accomplishment, however, did not have strong associations with the resource correlates except for work friends and participation. The authors suggest that both of these may help bolster feelings of competence, mastery, and self-efficacy. "The meta-correlations found among the three burnout dimensions are similar to those reported in Maslach and Jackson's (1986) manual" (p. 128).

In 1990 Lee & Ashforth published an article where they reported testing Maslach's three-dimensional model against a one-dimensional and a two-dimensional model. They found that the three-dimensional model had the best fit. Their research also looked at some factors that may be significantly correlated to the three dimensions such as psychological and physiological strain, and helplessness. They found that the three dimensions were related to the variables reflecting aspects of strain, stress, coping, and self-efficacy. One disadvantage was that Emotional Exhaustion was significantly related to Depersonalization, which means that we cannot be certain what these factors are individually contributing. Other results showed that Emotional Exhaustion and Depersonalization were related to psychological and physiological strain, while Personal Accomplishment was related to perceptions of performance. Thus this pattern of results

provides support for the use of these variables for measuring aspects of burnout. Another

interesting result of the analysis was that helplessness was more related to Emotional

Exhaustion and Depersonalization than Personal Accomplishment. The authors ventured

two explanations. One is that perhaps helplessness is closer to strain than

accomplishment. The other possibility is that the relationship may just be an artifact from

a contrast between negative wording in all the items used to score for Emotional

Exhaustion and Depersonalization and positive wording in all the items used for Personal

Accomplishment scores. Their suggestion is that the wording in the sections should be

changed so that each section is equally weighted in positive and negative statements[1]. All

in all, their study supports Maslach's use of a three dimensional model and the items used

to measure burnout.

Lee and Ashforth (1993) did a longitudinal study comparing Leiter to

Golembiewski and Munzenrider. Their study looked at urban public welfare agency

workers, used the MBI but expanded it (as cited in Leiter, 1993). They doubled the items,

one set asked about recipients, the other set asked about subordinates. A 0.51 correlation

was obtained between the paired questions. This was done as a compromise so that they

could make comparisons to Golembiewski's work. The two surveys were eight months

apart. They found that Emotional Exhaustion was a precursor to Depersonalization. They

did not find that Depersonalization led to reduced Personal Accomplishment. Their

model had Personal Accomplishment as a function of Emotional Exhaustion. They noted

that the relationships between Personal Accomplishment the other two aspects of burnout

was unclear and may be influenced by various factors of a work setting (Leiter, 1993).

In summary, there is support for Maslach's three dimensional model of burnout. Unfortunately, the previous research has not resulted in the inclusion of intervention or prevention strategies in the model structure.

Prevention Strategies

There is a plethora of suggestions for preventing burnout. The strategies can be grouped into two types: personal strategies and organizational strategies. Personal strategies are those that individuals can employ on their own, while organizational strategies are those that require policy or social changes in the work place.

Personal strategies are ways in which professionals can strengthen themselves in order to better meet the needs of the job. The most recommended strategy is to get enough sleep and eat a healthy diet (Kalker, 1984; Sparks, 1983). Unfortunately, it often is not enough. The next step may be to use stress management techniques that focus on relaxing the individual (Kalker, 1984; Martinez, 1989; Sparks, 1983; Spaniol, 1979) and reorganizing the person's schedule to effectively use the time and energy that the individual possesses (Farber, 1991b). This is thought to renew a person's energy and help him or her maintain a high level of personal accomplishment. This touches on the idea that activities outside the job can help renew the employee. There is evidence that activities such as regular exercise (Petruzzello, Landers, Hatfield, Kubitz, & Salazar, 1991), hobbies (Martinez, 1989), and increasing one's quality of life (e.g. appreciation of art) (Greenglass, Burke, & Ondrack, 1990), can help reduce the chances of burning out.

They say that "misery loves company". Although there is no empirical evidence supporting that statement, there is evidence that having someone to talk to can reduce

burnout. Pines & Aronson (1981) found that having someone who listens to you and

provides emotional support are the key elements in social support relationships (as cited

in Farber, 1991b). Support can come from colleagues (Greenglass, Burke, & Konarski,

1997; Greenglass, Fiksenbaum & Burke, 1996), supervisors (Greenglass et al., 1996;

Russell, Altmaier, & Van Velzen, 1987), family, and friends (Greenglass et al., 1996).

Another way to deal with burnout is to change the way the person thinks and

responds to stress. Cognitive restructuring is thought to reduce stress by: avoiding self-

defeating statements, engaging in self-praise, and setting realistic and flexible goals

(Farber, 1991b; Sparks, 1983). If the person cannot escape the stress, being able to

change the way he or she responds to it can reduce his or her risk of burning out.

One can always use therapy to cope with stress (Farber, 1991b; Freudenberger,

1982). However, if you are going to spend money you could always do what Farber

(1991b) mentions, treat yourself to dinner, some new clothes, or take a course. Therapy

carries with it a certain stigma which may prevent people from using it. The burnout

literature seems to have forgotten about this option. The majority of research in this area

has been clinical; few empirical studies have been done.

The preceding strategies are relatively easy ways to deal with or prevent burnout.

Some are cheap and well within the means of the average professional. The next category

of prevention strategies is not so easily attained. Organizational changes are more

difficult to bring about, probably because it involves many more people and it would

require changing the established procedure of running the school or even the school

board. The structural changes that have been proposed by Farber (1991b) are things such

as reducing client-staff ratios, shortening work hours, sensitizing administration to staff

problems, providing group support, allowing staff flexibility and autonomy, and

improving pre- and in-service training. Another form of organizational change would be

to include teachers in decision making. Vavrus found that the number one contributor to

low teacher morale was the fact that they were excluded from school decision-making

(as cited in Spaniol, 1979). What may be needed to bring about these changes is a solid

foundation of empirical research showing that these changes will make a difference. As

of now, little empirical evidence exists for many of the above-mentioned preventions.

Perhaps a more extensive search of the literature may find the empirical support for these

strategies, but if not, future researchers have their work cut out for them.

Rationale for the Hypothesis

Maslach's model of burnout does not include a category for the effect of

prevention strategies. By going back to the Conservation of Resources theory and

blending it with Maslach's model we can see that some prevention strategies can fit into

the resources section. In Maslach's model of burnout we can see that when there is work

overload then burnout can occur. This is associated with resources being: (a) threatened

(i.e. job cuts, financial cuts to the education system), (b) lost (i.e. no new text books or

equipment), or (c) invested resources do not obtain the expected rewards (lack of

reciprocity from students). Maslach includes "social support" as part of the lack of

resources section, and this study's two other prevention strategies can fit in as well. COR

theory defines four types of resources. *Objects*, which are valued for their physical and

symbolic status. *Conditions*, such as marriage, tenure, and seniority that can secure other

resources. *Personal characteristics*, that can aide in stress resistance, and *energies*, such as time, money, and knowledge that can be used to acquire other resources. It is proposed that exercise and hobbies can also fit into these four resources. Exercise can fulfill the need for resources by increasing one's energies. Hobbies could reduce stress by functioning as an alternative venue for the individual to find resources in personal characteristics. It could also fall under energies, because new hobbies can increase one's knowledge base.

It is possible that the three coping strategies selected (exercise, hobbies, and social support), could reduce the risk of burnout.Coping strategies have been found to be negatively correlated with burnout scores (Greenglass, Burke & Ondrack, 1990). Ragheb & McKinney (1993) found that the more college students participate in recreation activities, the less they perceived academic stress, as measured by the Perceived Academic Life Stress questionnaire.They also found that the more enjoyable the activity was, the less the students perceived academic stress. What they did not anticipate finding was that social and mass media activities (dating, parties, listening to the radio and watching TV) had higher negative correlations with perceived academic stress than did engaging in hobbies and sports/physical activities.

Some research has found that active coping which affects the source of the stress is more effective than inactive coping which affects the individual's own emotional reactions without solving the problem. Greenglass, Burke, & Ondrack (1990) generally found that active and inactive coping was negatively correlated with burnout. However, one inactive coping strategy called "memories" (which refers to pleasant reminiscences

of the past) was positively correlated with burnout. Greenglass and Burke (1991) found

that preventative coping strategies, those that are problem-focused, were negatively

correlated with psychosomatic responses (depression, anxiety, and somatization). Lastly

Berg (1994) found that "individual interventions that were intended to strengthen an

individual's body or spirit to better resist the ravages of stress are not, by themselves,

likely to achieve that outcome" (p. 187).

Although there is conflicting evidence for the advantages of individual coping

strategies, the researcher felt that there was enough evidence to support looking at the

effect of exercise, hobbies and social support, on burnout.

Exercise

The research on the effects of exercise is varied. Some look at exercise in

general, while others break down the characteristics of exercise to examine the effects of

type, frequency, and duration of exercise. This break-down allows researchers to

determine what aspect of exercising has the beneficial effects. It was the research on the

different aspects of exercise that persuaded the researcher to set up criteria for coding the

activities of the subjects as being exercise or not.

There is support for the effect of exercise in general. Pines and Kafry (1981)

found that physical activity was negatively correlated to burnout ($r = -.20, p < .001$) as

measured by the Tedium measure[2].

Other researchers evaluated the effect of a specific type of exercise on anxiety.

This became one of the criteria used in this study because Petruzzello et al. (1991) did a

meta-analysis on the effects of exercise and found a significant difference between

aerobic and non-aerobic exercise. Aerobic exercise yielded an effect size of 0.26 whereas

non-aerobic exercise yielded an effect size of -0.05 (Petruzzello et al., 1991; p. 150).

The second criteria is based on frequency of the exercise. Stearns, & Moore

(1993) found that frequency of exercise among RCMP officers was significantly

correlated with: total MBI score ($r = -.15, p < .01$) ; with Depersonalization ($r = -.11, p < .05$) and with Personal Accomplishment ($r = .27, p < .001$). As the frequency of exercise

increased, the levels of Depersonalization and total burnout decreased, while the levels

of Personal Accomplishment increased. Although Stearns and Moore (1993) do not

provide a minimum criteria for the benefits of exercise, two suggestions were found in

the writings of Sparks (1983). " *[I]t is generally agreed that the exercise must occur*

three or more times a week for at least 20-30 minutes if it to be of real value to the

participant" (Sparks, 1983 p. 37). It was this recommendation that led to the second and

third requirement for exercise - that it occur at least three times a week and that it

continue for 20-30 minutes at a time.

The research on the length of exercise is unclear. Petruzzello et. al (1991) meta

analysis found that the duration of the exercise was significant ($F_{(3,178)} = 5.39, p = 0.0014$)

(p. 151-2). Although, they found that exercise that was less than 20 minutes had a

negative effect on state anxiety ("the anxiety experienced in a given situation"

(Spielberger, 1972; p. 411)), further investigation into the duration of exercise and state

anxiety revealed moderating variables in the length of training categories. Petruzzello et

al. (1991) suggest that due to the confounding variables it may be too soon to conclude

that exercise longer than 20 minutes is needed to achieve stress reducing effects.

In light of the controversy over beneficial exercise characteristics, the researcher thought that four levels of criteria were necessary. Subjects were asked to report the frequency, the duration and the intensity (this was used to assess whether the activity was aerobic or not) of the exercise. One other question was asked; if they found the activity helped to reduce stress. It was thought that if the subjects did not find that the activity helped then it probably did not.

Hobbies

Hobbies also have some support for their ability to reduce stress. Pines and Kafry (1981) found that hobbies were negatively correlated with burnout (as evaluated by the Tedium measure) ($r = -.20, p \leq .001$). Stearns, & Moore (1993) found that "time for hobbies" significantly correlated with: a total MBI score ($r = -0.33, p < .001$); with Emotional Exhaustion ($r = -0.36, p < .001$); with Depersonalization ($r = -0.19, p < .01$) and with Personal Accomplishment ($r = .12, p < .05$).

There was no mention of criteria for a hobby to be related to reduced burnout. In the absence of criteria, the subjects were asked the same questions as for exercise.

Social Support

Social support has some effect on burnout. Greenglass et al. (1996) found negative correlations between burnout components and sources of support (informational, practical and emotional each including supervisor, co-worker and family/friend - all coefficients $p < .001$). They found that supervisor and coworker informational support significantly buffered against Emotional Exhaustion. Also that coworker and supervisor practical support, coworker and family/friend emotional

support, and coworker informational support, significantly buffered against

Depersonalization (Greenglass et al., 1996).

Pines (1983) studied 6 components of social support: (Listening, Technical

support, Technical challenge, Emotional support, Emotional challenge, and Sharing

social reality). She found that all components except technical support were significantly

positively correlated with burnout ($p < .10$) (as measured by the Tedium questionnaire).

She found a correlation between burnout and availability of support listening, technical

challenge, emotional support, technical support, and emotional challenge ($p < .10$). Pines

(1983) discovered that it is the degree to which the support is fulfilled, not how many

people are available to give support, that affects burnout. She also found that there are

sex differences: men require more listening as they burnout; however, women value

listening all through the process (Pines, 1983). Other research has found that talking to

friends was negatively correlated to burnout as measured by the Tedium measure ($r = -$

$.26, p < .001$) (Pines and Kafry, 1981).

In this study it was not necessary to distinguish between the different types of

social support. For this reason, subjects were asked questions about frequency, duration,

intensity, and satisfaction with social support, but only satisfaction was considered in the

coding.

The hypotheses for this study is as follows: Teachers who use coping strategies

(namely exercise, hobbies and social support) will have lower burnout scores than those

who do not. The independent variables were the three coping strategies. The dependent

variables were the three dimensions of burnout; Emotional Exhaustion,

Depersonalization, and Personal Accomplishment.

---

[1] Although this difference in the wording for the different dimensions is a valid point, for

the purposes of the present study it was decided that the questionnaire was sufficient as

is.

[2] The Tedium measure was developed by Pines, Aronson and Kafry (1980). The authors

feel that Tedium is a part of burnout, and that burnout is the extreme. They say that

Tedium and Burnout have the same symptoms but their origins are different. Tedium is a

result of any chronic pressures (mental, physical, or emotional) but burnout is a result of

constant or repeated emotional pressure associated with an intense involvement with

people over time (Pines, Aronson, & Kafry, 1980).

CHAPTER 3

Method

This investigation focused on high schools because the MBI is more sensitive to the concerns of secondary teachers than other groups of educators. Byrne (1989) did a study looking at the MBI and how well it measures burnout in teachers across four education levels, elementary, intermediate, secondary and university. She found that the inventory does not work well for the elementary teacher population. The MBI is satisfactory for the other 3 levels, however there are significant differences between the groups. There may be different structures of burnout for intermediate and secondary teachers. The inventory can be used for university professors (Byrne, 1989a; Meier, 1984), however university professors and high school teachers have different concerns. Byrne (1989a) found that university professors were concerned with research and administration while the high school teachers had student and parent problems. Byrne found that statistically the MBI targeted the secondary teachers better than the university professors.

Sample

Subjects were the 143 teachers who returned a completed questionnaire. Of the 890 questionnaires that were sent out, 174 (19.55%) were returned and 143 were complete enough to use in the study. Thirty one were not useable: 17 were not completed, eight did not return the consent form, five did not sign the consent form, and one did not send back the whole questionnaire.

Subjects using coping strategies were the primary concern. The average years of

teaching experience was 17.7, the range was from one year to 36 years. The mode for

teaching experience was three years. There were 50 respondents working in private

schools, and 93 in public schools. Seventy-two subjects met the criteria for exercise, 124

met the criteria for hobbies, and 56 for social support.

Subjects' burnout scores can be seen in Table 2. The majority of the subjects are

not in the high levels for the three dimensions. A little more than one quarter of the

sample did score high on Emotional Exhaustion, only 11% scored high on

Depersonalization and only 19% scored in the high level of burnout for Personal

Accomplishment.

Table 2

Number of Subjects in Each Dimension and Level of Burnout

	Burnout Dimensions		
Level of burnout	Emotional Exhaustion	Depersonalization	Personal Accomplishment
High	39 subjects (27%)	16 subjects (11%)	27 subjects (19%)
Moderate	42 subjects (29%)	27 subjects (19%)	41 subjects (29%)
Low	62 subjects (43%)	87 subjects (61%)	75 subjects (52%)

Note. Personal Accomplishment is scored in the opposite direction to the other
dimensions.

The average score for Emotional Exhaustion was 20.04, which is a moderate

score; the average score for Depersonalization was 6.59, which is a low score; and the

average score for Personal Accomplishment was 36.53, which borders between Moderate

and Low. The means and standard deviations were similar to those reported by the

authors of the scale as can be seen in Table 3.

Table 3

Mean Scores for this Study and the MBI Reported Norms for Teachers

	This Study			MBI norms for teachers		
	Mean Score	Level	St. dev.	Mean Score	Level	St. dev.
Emotional Exhaustion	20.04	Mod	10.33	21.25	Mod	11
Depersonalization	6.59	Low	5.68	11	Mod	6.2
Personal Accomplishment	36.53	Mod/ Low	7.29	33.54	Mod	6.9

The average age of respondents was 43.5, and the mode age range was between 45-54. Forty-eight were single, 83 were married, 2 were separated, 10 were divorced, no one was widowed. For the purpose of this study the subjects were grouped into married and not married. Sixty subjects were not married and 83 were married. Seventy-two females and 71 males responded. Seventy-nine people had children, 12 had children who were younger than 5 years, 27 had children who were 5-15 years old and 50 people had children over the age of 16 (see Appendix C for table showing breakdown of subjects by demographics).

The means and standard deviations found for men and women were similar to those reported by the MBI authors. This similarity supports this research by showing that the subjects in this study did not differ drastically from the norms reported.

Table 4

Gender Values from this Study

Sex		EE		DP		PA	
	N	Mean	SD	Mean	SD	Mean	SD
female	72	20.21	9.93	6.44	5.81	37.15	7.20
male	71	19.87	10.78	6.73	5.58	35.90	7.37

Table 5

Demographic Norms for the MBI Subscales (Appendix D, Maslach, Jackson & Leiter,

1996, p. 47)

Sex		EE		DP		RPA	
	N	Mean	SD	Mean	SD	Mean	SD
female	3,421	20.99	10.66	7.02	6.34	36.5	6.56
male	2,247	19.86	10.47	7.43	5.99	36.29	6.76

Measures

The questionnaire consists of three pages, each with its own instrument. The first

two pages were designed by the researcher. The first asked for demographic information.

Subjects were asked their age range. The ranges were 20-24, 25-44, 45-54, and 55 years

+. These groupings were based on a report from Statistics Canada (General Social Survey

Analysis Series, 1985). The subjects were asked what sex they were, what their marital

status was, if they had any children and if so, their ages. Then there were questions

relating to teaching: "How many years have you been teaching?"; "How many years have

you been teaching at this school?"; "How many years have you been at this board?";

"How many classes are you teaching?"; "How many different courses are you teaching?",

and "How many classes are you teaching outside your specialty?" (see Appendix A).

Coping strategies questionnaire. The second page was designed to discover what

activities the subjects engage in to reduce the stress they feel. This questionnaire, along

with another version, was given to seven junior high school teachers to determine if the

questions were clear and would reveal the information that was needed for the study. The

version that is included here, was the version that provided the most information without

leading the subjects. The first question is a yes or no question and asks, "Do you often

feel stressed at work?". Then the subjects are asked, "What do you do to relax?" and

examples of some activities are given. The subjects have three lines where they can write

in their activities. The last section of this page has a table for the subjects to fill in. For

each of their activities they are to answer five questions about the frequency of the

activity, the duration, the intensity (has two questions) and the satisfaction derived from

the activity (see Appendix A). The first four questions were partially based on research

which concluded that exercise is beneficial when: (a) done 3 times a week or more

(Stearns, & Moore (1993); (b) done for at least 20- 30 mins at a time (Sparks, 1983), and

(c) it is aerobic (Petruzzello et al., 1991) or leads to increased breathing and perspiration.

The item format partially came from Plante and Schwartz (1990) who asked their

subjects about type, duration, and intensity of their leisure activities.

Coding coping strategies questionnaire. The activities listed by participants were

grouped into three categories: exercise, hobbies, and social support. For an activity to be

classified as exercise it had to be an aerobic activity. If not, then it would not have the

beneficial effects of aerobic exercise which is the research the study is based on, and

would be classified as a hobby. Hobbies were any activity done alone or with others.

Social support was any activity that specifically gave support to the subject. The

researcher used Pines and Aronson's six functions of support as a guide. The support had

to be in the form of a) listening, b) professional support, c) professional challenge, d)

emotional support, e) emotional challenge, or f) sharing social reality (Pines & Aronson,

1981 as cited in Farber, 1991b). One other was included, supervisor support (Russell,

Altmaier, & Van Velzen, 1987). Any of these would be accepted as long as it was from

adults. Playing with children or talking to children who were minors did not count as

social support, but as hobbies.

For a response to be classified as participating in an aerobic activity, it had to

meet 4 criteria. The participation was rated on *Frequency*: the activity has to occur three

times a week or more, *Duration*: for 30 mins at a time or more, *Intensity*: they would

have to answer yes to being absorbed in the activity or subjects had to perspire and breath

more heavily than normal, and lastly *Satisfaction*: subjects had to feel that the activity

helps to reduce the stress they feel. If all the criteria were met, for one activity, then the

subject was given a code of one. If only some of the criteria were met then the subject

was given a 0. For hobbies and social support, the only criteria for scoring a one, was that

they reported that it helped to reduce their stress.

Maslach Burnout Inventory, Educators Survey. The Maslach Burnout Inventory

(Maslach, Jackson & Leiter, 1996) was included as the third page of the material sent out

to secondary school teachers. It is an inventory consisting of 22 items to determine

perceived levels of Emotional Exhaustion, Depersonalization, and reduced Personal

Accomplishment.

The first version of this inventory was based on the psychometric research done

by Maslach and Jackson (1981). The second version came out in 1986 and a third in

1996, with adjustments based on research done in the interim (Maslach, 1993). It has

three categories: Emotional Exhaustion, Personal Accomplishment, and

Depersonalization. Maslach and Jackson have generated three surveys for use with

different populations. There is a General Survey consisting of 16 questions, a Human

Services Survey and an Educators Survey, both consisting of 22 questions. An example

of the items on the Educators Survey is, "I can easily understand how my students feel

about things". The inventory used to have respondents rate both the frequency and

intensity of items but research has found that only the frequency rating was needed

(Maslach, 1993). The subjects are asked to rate the frequency of each item using a seven

point scale. The scale ranges from "0 - never" to "6 - every day".

An accompanying score card explains which questions are to be grouped together

to obtain a score for each of the three aspects of burnout. Some researchers combine the

scores into one overall score of burnout, however, the authors of the inventory are

strongly against this practice (Maslach, Jackson & Leiter, 1996). It is recommended that

the subjects get a score on each of the three categories. The actual score is not to be seen

as a dichotomous measure of burnout. Instead, the authors view burnout as a continuous

variable ranging from low to moderate to high. A low score of burnout would be

reflected in low scores on Emotional Exhaustion and Depersonalization, and high scores

of Personal Accomplishment. A moderate score would be an average score on all three

variables, while a high score of burnout would entail high scores on Emotional

Exhaustion and Depersonalization, and low scores of Personal Accomplishment. In the

inventory manual there is a chart that lists the average scores for different professions to

which the researcher can compare his/her population.

Procedures

The consent form and questionnaire were sent to the McGill University Ethics

Committee and the study was approved before any questionnaires were sent out (see

Appendix B). Possible schools were selected from Southam's Directory of Canadian

Schools (Cooper, Law, Gardiner, Brooks, & Groskind, 1996), and only those English

high schools which were within the desired region were contacted. The principals of 36

secondary schools in urban and suburban areas of Quebec were contacted by phone or

fax and asked to participate in the study. Twenty-three agreed and the questionnaire was

dropped off and distributed to the teachers via their mailboxes. Each subject was given a

consent form, the questionnaire, and a stamped self-addressed return envelope. The

consent form asked the participant to sign the consent form, complete a questionnaire,

and mail it back to the researcher. In June thank you cards were mailed out with

reminders that anyone wanting to participate could still send in their questionnaires. The

143 returned questionnaires were numbered, coded, and the responses entered into the

computer for analysis.

Only teachers who were working in secondary schools at the time of recruitment

were used for the study. Subjects were assigned to groups based on their responses to questions about what kind of activities they engage in to relax, and how they scored on the burnout inventory.

Subjects were informed that the questionnaires would be separated from the consent form and that once the responses were entered into the computer for analysis, there would be no links between their responses and their consent forms. There was no payment arrangement. The only remuneration that was offered was a copy of the results. Subjects who were interested could print their name and address in a box provided at the bottom of the consent form, and the results would be mailed to them using that address box so that their identities would not be kept on file.

Reliability

Although there are no reliability values for the Educators Survey of the MBI specifically, the General Survey has a reliability value of .76 and a test-retest value of .53 to .82 for 2 to 4 weeks (Meier, 1984). The Educators survey was taken from the original MBI and the word "recipient" changed to "student" (Maslach, Jackson, & Leiter, 1996). The authors cite two studies which substantiate the validity and reliability of the survey with these changes. The first study was carried out by Iwanicki and Schwab (1981) with a sample of 469 Massachusetts teachers and "reported Cronbach alpha estimates of .90 for Emotional Exhaustion, .76 for Depersonalization, and .76 for Personal Accomplishment" (as cited in Maslach, Jackson, & Leiter, 1996, p. 29). The second study was by Gold (1984) with 462 California students and "reported estimates of .88, .74 and .72 respectively" (as cited in Maslach, Jackson, & Leiter, 1996, p. 29).

The MBI's internal consistency was estimated by Cronbach's coefficient alpha and obtained a value of n = 1,316. The reliability coefficients for the subscales were the following: .90 for Emotional Exhaustion, .79 for Depersonalization, and .71 for Personal Accomplishment. The standard error of measurement for each subscale is as follows: 3.80 for Emotional Exhaustion, 3.16 for Depersonalization, and 3.73 for Personal Accomplishment" (Maslach, Jackson, & Leiter, 1996, p. 12). They cite research for test-retest reliability with five populations. The reliability coefficients for Emotional Exhaustion range from .59 to .82 , for Depersonalization ranging from .50 to .72, and for Personal Accomplishment ranging from .57 to .80 (Maslach, Jackson, & Leiter, 1996). It seems that based on these studies, Emotional Exhaustion has the strongest reliability. Overall the coefficients are strong and this gives us some reassurance that the inventory is consistent.

Validity

The MBI has good convergent validity. A trait has convergent validity when two independent measures of that trait are highly correlated. To test the survey's convergent validity, the authors looked at three things: external validation of personal experience, dimensions of the job experience, and personal outcomes. For each of these aspects they correlated the scores on the three variables of burnout with other surveys or tests. They found significant correlations between the MBI variables and these other measures (Maslach, Jackson, & Leiter, 1996). All the correlations are reported at the back of the manual. The correlations are quite strong; many of them are significant at the 0.05 level or better (0.01 and 0.001). With these correlations it is safe to say that the scale has

convergent validity.

The survey also needs to have evidence of discriminant validity. This is achieved when the measure of one trait is weakly correlated to a conceptually different trait using a similar method. In response to this need the authors provide the reader with the results of a study which compared scores on the MBI to the Job Diagnostic Survey measure of "General job satisfaction". The reasoning was that although burnout would be correlated with job satisfaction, the correlation would not be high enough to suggest that they were the same thing. What they found was that "job satisfaction had a moderate negative correlation with both Emotional Exhaustion ($r = - 0.23$, $p < 0.05$) and Depersonalization ($r = - 0.22$, $p < 0.02$), as well as a slightly positive correlation with Personal Accomplishment ($r = 0.17$, $p < 0.06$)" (Maslach, Jackson, & Leiter. 1996, p. 15). They feel that this provides the necessary support that the MBI is discriminating burnout from other phenomena.

Meier (1984) tested the convergent and discriminant validity of burnout using Campbell & Fiske's (1959) method. In this case three measures of burnout were used and correlated with each other to assess the convergent validity. The three burnout measures Meier tested were the MBI. the Meier's Burnout Assessment, and a simple self-rating questionnaire. These were tested against depression (tested using the MMPI-D. Costello-Comrey Depression Scale), and orderliness (tested using the Comrey's Personality - Order Scale, and Personality Research Form - Order Scale). He found that the three burnout scales were highly correlated with each other as can be seen in Table 6.

Table 6

Meier's correlations between three measures of burnout

Tests used:	correlations between the tests
MBI & MBA	0.61
MBI & self-rating	0.65
MBS & self-rating	0.63

"These high correlations indicate strong convergent validity for the measures of burnout" (Meier, 1984, p. 215). As for discriminant validity, the measures of burnout correlated highly with depression and it was these high correlations that prevented the measures from reaching the criterion set up by Campbell and Fiske (1959). This leaves the MBI with a weak discriminant validity. Meier (1984) proposes that with better measures of burnout it may be possible to better distinguish the phenomena from depression. For now depression and burnout may be linked because they are both global feelings that people may have difficulty distinguishing without outside help.

In sum the MBI is consistent in test-retest conditions. It has convergent validity because it is significantly and substantially correlated with other burnout measures. It has weak discriminate validity because it can discriminate betweem some concepts such as job satisfaction but not others like depression as Meier found. Even though it is weak in discriminate validity, the researcher felt that the MBI was just as good a measure as alternatives for the purpose of this study.

CHAPTER 4

Results

Correlations among the three scores provided by the Maslach Burnout Inventory (Maslach, Jackson & Leiter, 1996) were carried out to confirm that each measure was actually assessing separate dimensions of burnout. The results in Table 7 show that the scores obtained on pairs of measures are significantly related but those relationships are quite low except for Emotional Exhaustion and Depersonalization which has a .62 correlation in this population.

Pearson intercorrelations were also calculated for the three coping strategies and the three burnout scales which can be seen in Table 7. Only the correlations between the three Burnout scales were significant, however, these intercorrelations may not be

Table 7

Intercorrelations Between the Three Coping Strategies and the Three Scales of the Maslach Burnout Inventory

Scales	Ex	Hob	SS	EE	DP	PA
Subjects (n = 143)						
Exercise (Ex)	--	-.05	-.005	.01	.009	-.13
Hobbies (Hob)		--	.01	-.09	-.08	.12
Social Support (SS)			--	-.04	-.11	.17
Emotional Exhaustion (EE)				--	.62*	-.39*
Depersonalization (DP)					--	-.36*
Personal Accomplishment (PA)						--

Note. * $p = .0001$

accurate because the groups have unequal N's and Pearson's correlations are less

reliable when group sizes are unequal.

To test whether exercise, hobbies and/or social support might be associated

with significant differences in burnout taken as a holistic construct, a three way

MANOVA was done using the population of teachers completing both the MBI and the

Coping Strategies Survey.

The MANOVA obtained two significant Wilk's Lambda values. There is an

effect of exercise ($F_{(3,134)} = 2.69$, $p < .05$), and social support ($F_{(3,134)} = 2.12$, $p < .10$) on

Table 8

Group Means for Three Burnout Scores by Coping Strategy Groups

Group	n	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
		Mean	SD	Mean	SD	Mean	SD
Exercise							
met criteria	71	19.92	10.48	6.54	5.53	37.54*	7.62
did not meet criteria	72	20.17	10.24	6.64	5.86	35.54*	6.85
Hobbies							
met criteria	19	22.53	11.12	7.84	6.07	34.16	6.97
did not meet criteria	124	19.66	10.19	6.40	5.61	36.90	7.30
Social Support							
met criteria	87	20.38	10.16	7.11	5.81	35.54**	7.51
did not meet criteria	56	19.52	10.65	5.77	5.40	38.07**	6.71

Note. Personal Accomplishment is labeled in the opposite direction to the other
variables. In this case a favorable score would be one that is above 37 showing a high
level of Personal Accomplishment which is a low level of burnout.
* $p = 0.1182$, ** $p < 0.05$

one or more of the measures of burnout. Considering that there are unequal N's in the groups, a conservative p value was used. However, since the study is exploratory, a 0.1 or less significance value was considered significant. The group means for coping strategies by burnout dimensions can be seen in Table 8.

Next, three way ANOVAs for exercise and social support were done for each dimension of burnout. The mean Personal Accomplishment score was significantly different for subjects who did and did not meet the criteria set for adequate social support (Type III SS $F_{(3,139)} = 4.14, p < 0.05$).

It was thought that a stronger analysis would involve testing the three coping strategies for only those subjects who score high against those who score low on the burnout scale. Unfortunately, there are only four subjects who scored high on all three dimensions of burnout while 38 subjects scored low on all three dimensions. This left the cell sizes grossly uneven and it was decided not to pursue this setup.

Post Hoc Analysis

After the previous results were obtained, a three way ANOVA (two levels for each independent variable) was run to explore the relationships between exercise, hobbies, social support and all their two-way interactions for each of the three burnout dimensions. There was a significant interaction between exercise by hobbies for Depersonalization, (Type III SS $F_{(1,136)} = 6.92, p < 0.01$). No other interactions were significant. The means and standard deviation can be seen in Table 9.

Table 9

Group Means and Standard Deviations for the Interaction Between Exercise and

Hobbies.

Group	n	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
		Mean	SD	Mean	SD	Mean	SD
Ex 0 & Hob 0	7	24.43	10.91	11.57*	7.18	36.86	6.59
Ex 0 & Hob 1	65	19.46	10.33	5.97*	5.05	37.52	7.74
Ex 1 & Hob 0	11	22.00	11.94	5.18*	4.09	33.45	6.56
Ex 1& Hob 1	60	19.80	10.06	6.93*	6.16	35.98	6.92

Note. The 0 refers to subjects not meeting the criteria for the coping strategy, and 1
means that the subjects did meet the criteria. Therefore Ex 0 & Hob 0 refers to the
group of subjects who did not meet the criteria for either exercise or hobbies, whereas
Ex 0 & Hob 1 means that these subjects did not meet the criteria for exercise but did
meet the criteria for hobbies.
* $p < 0.01$

In order to be sure that the data demands of MANOVA and ANOVA had been

satisfied, a test of power and a test of homogeneity of the within groups distribution of

each score on the MBI was undertaken. The results of the power test assumed a

medium effects size of .30 or better and used a two tailed alpha level of .05. The

theoretical power for an N of 143 is 0.94. The test of homogeneity within groups for

each dependent variable was not significant.

There was a significant difference between Emotional Exhaustion,

Depersonalization, and Personal Accomplishment scores for those teachers who said

they were stressed at work versus those who said that they were not stressed. The high

stress group significantly differed from the low stress group on: (a) Emotional

Exhaustion ($F_{(1,134)} = 43.92$, $p = 0.0001$); (b) Depersonalization ($F_{(1,134)} = 14.88$, $p = 0.0002$); and (c) Personal Accomplishment ($F_{(1,134)} = 19.59$, $p = 0.0001$). The means for these groups can be seen in Table 10. Due to missing data only 136 subjects were used in this analysis.

Table 10

Means for Perceived Stress and Demographic Variables for the Three Dimensions of Burnout

	n	Emotional Exhaustion		Depersonalization		Personal Accomplishment	
	n	Mean	SD	Mean	SD	Mean	SD
Perceived Stress							
stress	87	23.95[1]	9.76	7.92[1]	5.63	34.45[1]	7.09
no stress	49	13.29[1]	7.48	4.29[1]	4.58	39.84[1]	6.30
School Type							
private	50	20.8	9.43	5.48[2]	5	37.56	7.15
public	93	19.63	10.8	7.18[2]	6.15	35.98	7.34
Sex							
female	72	20.21	9.93	6.44	5.81	37.15	7.20
male	71	19.87	10.78	6.73	5.58	35.90	7.37
Martial Status							
not married	61	21.30	10.15	7.51[2]	6.23	35.84	7.05
married	82	19.11	10.42	5.90[2]	5.16	37.05	7.45

Note. [1] $p < .001$, [2] $p < .10$

Demographic results:

To further explore post hoc the data, several one way ANOVAs (two levels for

each demographic variable) were run for each of the demographic variables for each

dimension of burnout. There was a significant difference between public and private

school means for Depersonalization ($F_{(1,141)}$ = 2.97, p < 0.10). Secondary teachers

employed in public schools had higher scores than those in private sector schools. The

means for these groups can be seen in Table 10.

There was a significant difference in Depersonalization means for those subjects

who were married and those who were not married ($F_{(1,141)}$ = 2.84, p < 0.10). Those

who were married, had lower Depersonalization scores than those who were not

married. The means for these groups can be seen in Table 10.

CHAPTER 5

Discussion

The present study set out to investigate the relationship between three coping strategies and three dimensions of burnout. Of the three coping strategies to be correlated with the three burnout scores, only differences in the quality of exercise and social support were associated with differences in Personal Accomplishment scores.

Exercise

General exercise (without specific criteria) has not been found to be correlated with the MBI (Berwick, 1992; Stearns & Moore, 1993). In this study, the subjects were coded as engaging in exercise if they met the criteria set up by the researcher. Because this study used four criteria, the results are difficult to compare with previous research which only looked at one of these factors at a time.

In this study Personal Accomplishment scores for those who were exercising were not significantly different at the .10 alpha level from those who were not exercising. However, with a $p = 0.1182$ value, it may have reached significance with a larger and more heterogeneous sample. A significant finding would be reasonable considering the existing research. Petruzzello et al. (1991) found aerobic exercise to be related to Personal Accomplishment and Stearns & Moore (1993) found that frequency was related to Depersonalization and Personal Accomplishment. It may be that aerobic exercise brings the body to a higher level of exertion that is more helpful in reducing the stress one is experiencing. Frequency of exercise could be beneficial because stress can build up weekly if not daily, and frequent activities can reduce the stress felt, leaving

individuals ready to face another day. Perhaps exercising increases Personal

Accomplishment because people see their exercise as achieving a personal goal, which

gives them a better outlook on their lives and jobs. Exercise fits into the COR theory of

burnout because better health, or a trimmer body can be considered a resource. By

increasing their resources, people are creating a buffer that can help them to better deal

with the demands of their jobs.

Hobbies

Hobbies were not found to be correlated with the three burnout scores. This

finding contradicts those of Stearns and Moore (1993). In their RCMP study, they found

that "time for hobbies" was negatively correlated with the total MBI, Emotional

Exhaustion, Depersonalization and positively correlated with Personal Accomplishment.

It is possible that there is something in hobbies that can help reduce the stress felt by

police officers that does not happen with teachers.

Hobbies may not have been significant because other forms of leisure could be

more relaxing. Ragheb and McKinney (1993) found that social and mass media activities

(dating, parties, listening to the radio and watching TV) had higher negative correlations

to perceived stress than did engaging in hobbies and sports/physical activities. This was

done with university and college students, but it is possible that more socially active

means of recreation could result in lower stress levels.

In the post hoc analysis, there was a significant interaction between exercise and

hobbies for Depersonalization. The Depersonalization mean scores were significantly

different between subjects who did not participate in either exercise or hobbies versus

those subjects who participated in exercise, hobbies, or both. This suggests that, for

teachers, any combination of individual interest directed activity as well as physical

fitness can be used to protect them from depersonalizing their students. According to

Conservation of Resource Theory (Hobfoll & Freedy, 1993), stress occurs when

resources are threatened, and we know that prolonged stress leads to burnout. Perhaps by

engaging in exercise, hobbies or both, the individual is reducing stress by either

protecting or gaining resources. Maslach's model of burnout shows a path from lack of

resources to Exhaustion to Depersonalization. Perhaps a more accurate picture would

include a direct link between resources and Depersonalization where exercise and

hobbies can have an impact. It could be that these activities outside work influence

depersonalizing students because the teachers feel that they are accomplishing goals and

these achievements increase their patience with the students.

Social Support

Social support was significantly associated with Personal Accomplishment which

is consistent with the results of Greenglass. Burke & Konarski (1997) and Greenglass et

al. (1996). These two studies differ from the present investigation by also finding

negative correlations between social support and Depersonalization. and Greenglass et al.

(1996) found significant negative correlations between support and Emotional

Exhaustion. These relationships to the other two dimensions of burnout may be

accounted for by the nine sources of support used by Greenglass et al. (1996) and three

sources of support used by Greenglass, Burke & Konarski (1997).

By not specifying sources of support, this study may have missed cueing subjects

to look for support that they may not have considered. Almost all of the 56 subjects who reported social support in this study mentioned family and friends, but only seven mentioned talking to colleagues and no one mentioned supervisor support. This absence of work related support could be the factor resulting in not finding the relationships with Depersonalization and Emotional Exhaustion. Evidence for this relationship can be seen in the study done by Russell et al. (1987) who found that supervisor support was linked to lower burnout scores on all three dimensions of the MBI for classroom teachers.

It is quite possible that support outside the work place can only reaffirm that a person is doing his or her best, but that support within the work place can affect a person's outlook on the job and help reduce exhaustion. Support gained from those who are working in the same situation and having to deal with the same pressures is probably rewarding because they know what the individual is going through, but support from supervisors may be the most important factor because they are in a position to aid the employee's work. If a teacher is having trouble with students, knowing that colleagues are in the same situation is comforting because the teacher knows that he or she is not alone, but support from administration when it comes to discipline and interactions with parents may be invaluable. It is the availability of resources and the knowledge that administration is backing the teacher in tough situations that may be the most affirming. This kind of support can protect teachers from burnout.

With this evidence that supervisor support may be the important link to Emotional Exhaustion and Depersonalization there may be cause to make a slight change in the model proposed by Maslach. Social Support may need to be divided into family

and friend support affecting Personal Accomplishment and supervisor and coworker

support affecting Emotional Exhaustion and Depersonalization. With future research this

distinction may become more pronounced.

Perceived Stress

Subjects who said that they were stressed at work had significantly higher scores

on all three measures. This means that they had higher scores on Emotional Exhaustion,

higher scores on Depersonalization, and lower scores on Personal Accomplishment. This

could mean that people are very aware of how they are feeling, or that they are good at

keeping their answers consistent when filling in forms.

Burnout is different from job stress because burnout is the result of prolonged job

stress. This study appears to support this view since 49 subjects said that they were

stressed but only four subjects scored in the high levels of burnout for all three

dimensions. Conservation of Resources Theory might say that the teachers who are

reporting stress are responding to their resources being lost or threatened. If this state

continues for an extended period of time, they may be vulnerable to burnout.

Demographic Results

Private versus public school. Teachers in private schools had significantly lower

scores on Depersonalization than teachers in public schools, and there were no

significant differences between the two types of schools for Emotional Exhaustion or

Personal Accomplishment. It was surprising to find that there was only one significant

burnout dimension. The primary explanation is that the sample in this study has too few

clearly burned out teachers to allow an adequate test of educational setting differences.

Still, school type may not outweigh other environmental influences on emotional states called "burnout." Teachers can be stressed by having too many activities outside of school. One subject remarked on the questionnaire " I feel stressed because I'm engaged in too many activities OUTSIDE work (2 classes/week for my masters, 3 hours/week of private tutoring, homework for my class, gym 3 times/week, Human Resources Committee at work (implementing a new B!G project)) etc." Future research should attempt to clarify the magnitude of in and out of school influences.

Sex. There were no significant differences between the sexes for each of the three burnout dimensions, Emotional Exhaustion, Depersonalization, and Personal Accomplishment. This is inconsistent with previous research which has found that males score higher on Depersonalization than females (Berg, 1994; Byrne, 1989b; Greenglass & Burke, 1988; Greenglass, Burke and Ondrack, 1990).

As for correlations between sex and Emotional Exhaustion, only Berwick (1992) who studied student affairs administrators, found that being male was correlated with lower Emotional Exhaustion score. This is consistent with Byrne (1989b) who says that sex is a factor in Emotional Exhaustion (for elementary and university professors), and females have higher scores than males. However, this study did not find this gender difference.

One possible reason for not finding a difference in this study could be the time of year the questionnaires were sent out. Subjects received the surveys in May which is the last month before the students write their exams. It is a very stressful time of year and it could be that at this time both the sexes are equally burned out.

Marital Status. There were no significant differences between being married and not married for two of the three burnout scales Emotional Exhaustion, or Personal Accomplishment. This is consistent with other researchers who have found no significant effects of marital status on burnout (Byrne 1989b; Greenglass, Burke and Ondrack. 1990).

There was however, a significant difference for marital status on Depersonalization. Subjects who were married had significantly lower scores than their not married colleagues. This is consistent with what Maslach and Jackson (1985) found, that married people are less apt to experience burnout (Cordes and Dougherty, 1993).

It is possible that marital status can have the same effect as social support, in which case it should affect the three burnout scores like Cordes and Dougherty (1993) reported, or at least have the same results as this study and affect Personal Accomplishment. There are, however, other factors in marital status that are not a consideration in social support: things like children, whether it is a happy marriage or not, or extended family support or pressures. A good marriage can provide the support needed to buffer the stresses of work, whereas a rocky marriage can add to a stressful situation. There may also be differences between men and women. Greenglass and Burke (1988) reported that marital satisfaction negatively predicted burnout in women but not in men.

Perhaps the resource that is marriage does not affect one's feeling of exhaustion but can prevent a person from becoming cynical and depersonalizing students. Marriage does fall under "conditions" resource that can be used to secure other resources.

Limitations of the Present Investigation

One of the major limiting factors of this study was the time of year the survey was

distributed to teachers. Questionnaires were dropped off in May, the month before the

students wrote their exams. This may account for the low return rate of 19.55%. Future

questionnaires should be given out when teachers are not at their most hurried, but not

too early in the school year so as to get a better sense of the stress they are under.

Another reason for the low return rate could be the fact that subjects were asked

to identify themselves. Two principals informed the researcher that teachers may not

participate if they had to sign their name on the consent form. In fact, of the

questionnaires returned, five did not sign the consent form (two subjects made comments

about how they thought that it wasn't necessary), and eight returned the questionnaire

without the consent form. Future consent forms should be modified so that subjects are

asked to initial the consent form as confirmation that they have read and agreed to

participate in the study. This will eliminate subject identification in an anonymous study

while still providing consent and hopefully this change will increase participation.

For studies looking at social support, consideration should be given for

identifying which sources of support are of interest. It is possible that the present

investigation was unable to find the relationships between social support and Emotional

Exhaustion or Depersonalization because supervisor support was not present.

Future Directions

The study does provide evidence that coping strategies and demographic factors

are associated with significant differences in the Depersonalization and Personal

Accomplishment dimensions of burnout reported by teachers in Quebec schools. Reviews of research in other professions reported findings that were not always replicated with the sample of teachers participating in this study. This suggests that the effects of social support at work and the home environment may vary among professions, while there may be an interaction effect of exercise and hobbies in teaching but evidence of this happening in other professions has yet to be seen. Further research should directly compare teachers to police officers and people in the health professions, such as nurses, in order to further clarify the potential differences in the occurrence of burnout and the path from extended periods of high stress in professional work to burnout.

The incidence of burnout in teaching may not have been adequately represented in this study due to the procedures used even though it included teachers ranging from one to 36 years of experience. Future research comparing teaching to other professions would help clarify the magnitude of burnout. Regardless of the incidence, intervention is important since depersonalization and loss of personal accomplishment may also affect student opportunities to learn. Depersonalization may be particularly destructive since students are young and often vulnerable to those in authority. The possibility and outcomes of these effects also need to be studied in the future.

References

Aulls, M. W. (1998). The contribution of classroom discourse to what content students learn during curriculum enactment. *Journal of Educational Psychology, 90,* 56-69.

Bardo, P. (1979). The pain of teacher burnout: A case history. *Phi Delta Kappan, 61,* 252-254.

Berg, B. D. (1994). Educator burnout revisited: Voices from the staff room. *Clearing House, 67*(4), 185-188.

Berwick, K. R. (1992). Stress amoung student affairs administrators: The relationship of personal characteristics and organizational variables to work-related stress. *Journal of College Student Development, 33,* 11-19.

Bundy, O. K. (1981). Everything you always wanted to know about professional burnout but were afraid to ask. *Contemporary Education, 53*(1), 9-11.

Burisch, M. (1993). In search of theory: Some ruminations on the nature and etiology of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 75-93). Washington, DC: Taylor & Francis.

Byrne, B. M. (1989a, August). *Teacher burnout: Validating the maslach burnout inventory across four educational levels.* Paper presented at the annual meeting of the Americal Psychological Association, New Orleans; LA. (ERIC Document Reproduction Service No. 289 846)

Byrne, B. M., & Hall, L. M. (1989b, March). *An investigation of factors contributing to teacher burnout: The elementary, intermediate, secondary, and postsecondary school environements.* Paper presented at the annual meeting of the American Educational Research

Assocation. San Francisco;CA. (ERIC Document Reproduction Service No. 304 413)

Cherniss, C. (1980). *Professional burnout in human service organizations.* New York: Praeger.

Cherniss, C. (1993). Role of professional self-efficacy in the etiology and amelioration of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 135-149). Washington, DC: Taylor & Francis.

Cooper, C., Law, B., Gardiner, C., Brroks, L., & Groskind, D. (Eds.). (1996). *Southam's directory of Canadian schools* (7th ed.). Don Mills, ON: Southam.

Cordes, C., & Dougherty, T. W. (1993). A review and an integration of research on job bunrout. *Academy of Management Review, 18,* 621-656.

Courage, M. M., & Williams, D. D. (1987). An approach to the study of burnout in professional care providers in human service organizations. *Journal of Social Service Research, 10(1),* 7-22.

Doyle, W. (1985). Academic work. *Review of Education Research, 18,* 159-199.

Doyle, W. (1984). How order is accomplished in the classroom. *Journal of Curriculum Studies, 16,* 259-277.

Employer Bargaining Committee for Protestant School Boards. (1995-1998). *EI Agreement binding.* Kirkland, QC: Provincial Association of Protestant Teachers. (ISBN 2-550-25892-4)

Farber, B. A. (1991a). *Crisis in education: Stress and burnout in the american teacher.* San Francisco: Jossey-Bass.

Farber, B. A. (1991b). Dealing with teacher burnout: Some solutions and their

problems. In *Crisis in education: stress and burnout in the american teacher* (pp.

280-313). San Francisco: Jossey-Bass.

Farber, B. A. (1991c). Symptoms and types: Worn-out, frenetic, and

underchallenged teachers. In *Crisis in education: Stress and burnout in the american

teacher* (pp. 72-97). San Francisco: Jossey-Bass.

Forman, S. G. (1982). Stress management for teachers: A cognitive-behavioral

program. *Journal of School Psychology, 20,* 180-187.

Freudenberger, H. (1974). Staff burn-out. *Journal of Social Issues, 30*(1),

159-165.

Garte, S. H., & Rosenblum, M. L. (1978). Lighting fires in burned-out counselors.

Personnel and Guidance Journal, 57, 158-160.

Golembiewski, R. T., & Munzenrider, R. F. (1988). Motivators, challenges, and

conventions concerning measurement: Introducing the phase model of burnout. In *Phases

of burnout developments in concepts and applications* (pp. 6-31). New York: Praeger.

Greenglass, E., Burke, R., & Ondrack, M. (1990). A gender-role perspective of

coping and burnout. *Applied Psychology: An International Review, 39*(1), 5-27.

Greenglass, E., Fiksenbaum, L., & Burke, R. J. (1996). Components of social

support, buffering effects and burnout: Implications for psychological functioning.

Anxiety, Stress, and Coping, 9, 185-197.

Greenglass, E. R., & Burke, R. J. (1988). Work and family precursors of burnout

in teachers: Sex differences. *Sex Roles, 18,* 215-229.

Greenglass, E. R., & Burke, R. J. (1991). The relationship between stress and coping amoung type As. *Journal of Social Behavior and Personality, 6,* 361-373.

Greenglass, E. R., Burke, R. J., & Konarski, R. (1997). The impact of social support on the development of burnout in teachers: Examination of a model. *Work and Stress, 11,* 267-278.

Hobfoll, S. E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 115-129). Washington, DC: Taylor & Francis.

Kahill, S. (1988). Symptoms of profession burnout: A review of the empirical evidence. *Canadian Psychology, 29,* 284-297.

Kalker, P. (1984). Teacher stress and burnout: Causes and coping strategies. *Contemporary Education, 56,* 16-19.

Kantas, A., & Vassilaki, E. (1997). Burnout in greek teachers: Main findings and validity of the maslach burnout inventory. *Work and Stress, 11,* 94-100.

Kyriacou, C. (1987). Teacher stress and burnout: An international review. *Educational Research, 29,* 146-152.

Lee, R. T., & Ashforth, B. E. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology, 75,* 743-747.

Lee, R. T., & Ashforth, B. E. (1993). A logitudinal study of burnout among supervisors and managers: Comparisons between Leiter and Maslach (1988) and Golembiewski et al. (1986) models. *Organizational Behavior and Human Decision*

Processes, 54, 369-398.

Lee, R. T., & Ashforth, B. E. (1996). A meta-analytic examination of the

correlates of the three dimensions of job burnout. *Journal of Applied Psychology, 81,*

123-133.

Leiter, M. P. (1993). Burnout as a developmental process: Consideration of

models. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout:*

Recent developments in theory and research (pp. 237-250). Washington, DC: Taylor &

Francis.

MacBride, A. (1983). Burnout: Possible? probable? preventable? *Canada's*

Mental Health, 31(1), 2-3, 8.

Martinez, J. G. R. (1989). Cooling off before burning out. *Academic Therapy, 24,*

271-284.

Maslach, C. (1987). Burnout Research in the social services: A critique. *Journal*

of Social Services, 10, 95-105.

Maslach, C. (1993). Burnout: A multidimensional perspective. In W. B.

Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in*

theory and research (pp. 19-32). Washington, DC: Taylor & Francis.

Maslach, C., & Jackson, S. (1981). The measurement of experienced burnout.

Journal of Occupational Behaviour, 2, 99-113.

Maslach, C., & Jackson, S. E. (1985). The role of sex and family variables in

burnout. *Sex Roles, 12,* 837-851.

Maslach, C., Jackson, S. E., & Schwab, R L. (1986). *The Maslach Burnout*

Inventory. Palo Alto, CA: Consulting Psychologists Press.

Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Palo Alto, California: Consulting Psychologists Press.

Maslach, C., & Schaufeli, W. (1993). Historical and conceptual development of burnout. In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 1-16). Washington, DC: Taylor & Francis.

Meier, S. T. (1984). The construct validity of burnout. *Journal of Occupational Psychology, 57,* 211-219.

Perlman, B., & Hartman, E. A. (1982). Burnout: Summary and future research. *Human Relations, 35,* 283-305.

Petruzzello, S. J., Landers, D. M., Hatfield, B. D., Kubitz, K. A., & Salazar, W. (1991). A meta-analysis on the anxiety-reducing effects of acute and chronic exercise. *Sports Medicine, 11,* 143-182.

Pines, A. (1983). On burnout and the buffering effects of social support. In B. A. Farber (Ed.), *Stress and burnout in the human service professions* (pp. 155-174). Elmsford, NY: Pergamon.

Pines, A., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to personal growth.* New York: Free Press

Pines, A., & Kafry, D. (1981). The experience of tedium in three generations of professional women. *Sex Roles, 7,* 117-134.

Pines, A. M. (1993). Burnout: An existential perspective. In W. B. Schaufeli, C.

Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 33-51). Washington, DC: Taylor & Francis.

Plante, T. G., & Schwartz, G. E. (1990). Defensive and repressive coping styles: Self-presentation, leisure activities, and assessment. *Journal of Research in Personality, 24,* 173-190.

Ragheb, M. G., & McKinney, J. (1993). Campus recreation and perceived academic stress. *Journal of College Student Development, 34,* 5-10.

Russell, D. W., Altmaier, E. & Van Velzen, D. (1987). Job-realted stress, social support, and burnout among classroom teachers. *Journal of Applied Psychology, 72,* 269-274.

Salo, K. (1995). Teacher stress and coping over an autumn term in finland. *Work and Stress, 9,* 55-66.

Spaniol, L. (1979). Teacher burnout. *Instructor, 88,* 56-62.

Sparks, D. (1983). Practical solutions for teacher stress. *Theory into Practice, 12,* 33-42.

Spielberger, C. D. (1972). *Anxiety: Current trends in theory and research.* New York: Academic Press.

Statistics Canada. (1987). *Health and social support (1985).* General Social Survey Analysis Series, (11-612E no. 1). (p. 59-62). Ottawa, ON: Government of Canada.

Stearns, G. M., & Moore, R. J. (1993). The physical and psychological correlates of job burnout in the royal canadian mounted police. *Canadian Journal of Criminology, 35,* 127-147.

Stephenson, D. (1990). Affective consequences of teachers' psychological

investments. *Journal of Educational Research, 84,* 53-57.

Walsh, D. (1979). Classroom stress and teacher burnout. *Phi Delta Kappan, 61,*

253.

Wolpin, J., Burke, R. J., & Greenglass, E. R. (1991). Is job satisfaction an

antecedent or a consequence of psychological burnout? *Human Relations, 44*(2),

193-209.

APPENDICES

Appendix A

<div align="right">**Questionnaire #** _____</div>

Consent form

Dear Participant,

  This questionnaire is part of a masters thesis being done at McGill University in the Faculty of Education. The purpose of the study is to explore the connection between teacher stress and individual coping strategies. The survey consists of three pages, and it takes approximately 10 minutes to fill out. The questions are designed to find out what activities you engage in and whether or not they help to reduce stress.

  If you agree to participate, all responses will be treated with the strictest respect for your privacy and confidentiality. No parties other than the researcher and her supervisor will see the questionnaires. After today, a number will be assigned above and to each page of this questionnaire and the cover page will be removed. The two parts will be stored separately, so that even the researcher will not know whose questionnaire is whose. As per McGill regulations, the questionnaires will be stored in the faculty of Education. Once the data has been entered into the computer, the links between the questionnaires and individual subjects will be destroyed so that no future person will be able to link your name to your answers. The results of this study may be published at a future time in a journal, but there will be no reference to individuals or specific schools.

  There are no risks to you as a professional if you choose to participate or if you refuse. No one will pressure you to complete the questionnaire and send it in. This is completely voluntary. This study hopes to achieve a better understanding of how professionals cope with stress and potential burnout. By filling in the questionnaire and mailing it back in the envelope provided, you are aiding our understanding of the relationship between stress and coping strategies. This information will benefit administrators and teachers who may read the thesis or journal article.

  If at any point you do not wish to continue or you wish to have your information removed from the study feel free to contact me and it will be done, no questions asked.

Thank you for your participation.

Katherine Palesch
(514) 485-3669

If you are interested in participating in the study, please sign below & **return by May 30, 1998**

*I, (print name)*_____*,would like to participate in this study.*

Signed: _____

If you are interested in receiving a brief summary of the results of this study, fill in the box and one will be mailed to you. Please print, this box will be cut out and used to send you the results.

    Name: _____
    Street: _____
    City: _____
    Postal Code: _____

Please answer the following questions.

How old are you?   20 - 24 years ☐
                     25 - 44 years ☐
                     45 - 54 years ☐
                     55 years + ☐

Sex: Female ☐   Male ☐

Martial Status: Single   ☐
                    Married   ☐
                    Separated   ☐
                    Divorced   ☐
                    Widowed   ☐

Do you have any children: Yes ☐   No ☐

     If yes, how many _____
     If yes, how old are they?   under 5 years _____
                                   5 - 15 years _____
                                   16 years and older _____

How many years have you been teaching: _____

How many years have you been teaching at this school? _____

How many years have you been at this Board? _____

How many classes are you teaching? _____
(if you have the same group of students for two subjects count them as two classes.)

How many different courses are you teaching? _____

How many classes are you teaching outside your specialty? _____

Do you often feel stressed at work?(Circle one answer)   Yes   No

What do you do to relax? (either after school and/or on weekends)
list as many as you like

_____

_____

From the list of activities above select the three most important ones for helping you relax. Next write them in activity boxes 1, 2, and 3. Finally for each activity, fill in the answer to each of the 5 questions in the boxes under the activity title.

Questions:	Activity 1: _____	Activity 2: _____	Activity 3: _____
How many times a week do you engage in this activity?			
How long in minutes or hours does each activity last?			
Do you get absorbed in the activity? (ie. do you lose track of time)			
If your activity is exercise, do you perspire, and do you breathe more heavily than normal?			
Overall, does this current pattern of activity help reduce your stress?			

Christina Maslach • Susan E. Jackson • Richard L. Schwab

Educators Survey

The purpose of this survey is to discover how educators view their job and the people with whom they work closely.

On the following page there are 22 statements of job-related feelings. Please read each statement carefully and decide if you ever feel this way *about your job*. If you have *never* had this feeling, write a "0" (zero) in the space before the statement. If you have had this feeling, indicate *how often* you feel it by writing the number (from 1 to 6) that best describes how frequently you feel that way. An example is shown below.

Example:

HOW OFTEN:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

HOW OFTEN
0 - 6   Statement:

_____   I feel depressed at work.

If you *never* feel depressed at work, you would write the number "0" (zero) under the heading "HOW OFTEN." If you *rarely* feel depressed at work (a few times a year or less), you would write the number "1." If your feelings of depression are fairly frequent (a few times a week, but not daily) you would write a "5."

Consulting Psychologists Press, Inc.
3803 E. Bayshore Road • Palo Alto, CA 94303

Educators Survey

HOW OFTEN:	0	1	2	3	4	5	6
	Never	A few times a year or less	Once a month or less	A few times a month	Once a week	A few times a week	Every day

HOW OFTEN
0 - 6   Statements:

1. _____   I feel emotionally drained from my work.

2. _____   I feel used up at the end of the workday.

3. _____   I feel fatigued when I get up in the morning and have to face another day on the job.

4. _____   I can easily understand how my students feel about things.

5. _____   I feel I treat some students as if they were impersonal objects.

6. _____   Working with people all day is really a strain for me.

7. _____   I deal very effectively with the problems of my students.

8. _____   I feel burned out from my work.

9. _____   I feel I'm positively influencing other people's lives through my work.

10. _____   I've become more callous toward people since I took this job.

11. _____   I worry that this job is hardening me emotionally.

12. _____   I feel very energetic.

13. _____   I feel frustrated by my job.

14. _____   I feel I'm working too hard on my job.

15. _____   I don't really care what happens to some students.

16. _____   Working with people directly puts too much stress on me.

17. _____   I can easily create a relaxed atmosphere with my students.

18. _____   I feel exhilarated after working closely with my students.

19. _____   I have accomplished many worthwhile things in this job.

20. _____   I feel like I'm at the end of my rope.

21. _____   In my work, I deal with emotional problems very calmly.

22. _____   I feel students blame me for some of their problems.

(Administrative use only)   cat.   cat.   cat.
EE: _____ _____   DP: _____ _____   PA: _____ _____

Appendix C

Breakdown of Subjects by Demographics

Group	n		
School Type:			
Private school:	50		
Public school:	93		
Age:			
20-24 years :	3		
25-44 years:	62		
45-54 years:	63		
55+ years:	15		
average age:	43.5		
Sex:			
Female:	72		
Male:	71		
Marital Status:			
Single:	48	collapsed to not married:	60
Married:	83	married:	83
Separated:	2		
Divorced:	10		
Widowed:	0		
Number of Children:			
79 subjects have children			
1 child:	17		
2 children:	43		
3 children:	13		
4 children:	6		
Age of Children:			
< 5 years:	12		
5 - 15 years:	27		
16 + years:	50		

Note. Total number of subjects = 143