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A Study of Factors Influencing the Burnout Syndrome as Perceived by North Dakota Public School Classroom Teachers

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A STUDY OF FACTORS INFLUENCING THE BURNOUT SYNDROME AS PERCEIVED BY NORTH DAKOTA PUBLIC SCHOOL CLASSROOM TEACHERS

by
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Signature Thomas Arnold

Date Nov 5, 1981

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ABSTRACT

Teacher burnout is a term used to describe teachers' feelings and attitudes about themselves in relationship to their work. It has been considered a problem and a contagion. This study was the initial basic research on teacher burnout conducted in North Dakota.

Purpose of the Study

The purpose of this study was to investigate the extent to which the burnout syndrome exists among North Dakota public school classroom teachers, the significant factors which affect it, and the determination of whether significant relationships exist between and/or among ten demographic variables.

Design of the Study

The Maslach Burnout Inventory and the demographic data sheet were mailed to 350 randomly selected public school classroom teachers throughout North Dakota during the 1980-81 school year. Correlation coefficients, multiple linear regressions, and analyses of variance were employed. The .05 level of significance was considered statistically sufficient to reject the null hypotheses.

Conclusions

The major conclusions are as follows:

1. Based on the limitations of the instruments used, it cannot be concluded whether North Dakota public school classroom teachers are burned out. The instruments do help to clarify greater

and lesser degrees of feeling burned out. The data suggest that there are indicators of burnout which teachers could identify

2. It appears that the emotional exhaustion factor, the depersonalization factor, and the personal accomplishment factor were major contributors to the burnout syndrome

3. The level of teaching and the sex of teachers were found to be significantly different on the four burnout factors more frequently than other demographic variables

4. Other demographic variables which have a lesser impact upon the burnout syndrome included number of years of teaching experience, salary, educational background, number of dependents, and size of community

5. While marital status was not individually a statistically significant variable, its contribution in a set of variables was significant, indicating a suppressor relationship

6. The teacher's age and the average number of students in the classroom apparently do not have a significant impact upon the burnout syndrome

7. Teachers perceived more problems in their relationships with their administrators than they did with their students

CHAPTER I

BACKGROUND OF THE STUDY

> If teaching can and should be one of the most rewarding, gratifying, and exciting of professions yet unfortunately, for many teachers, it is not, what can be done about it (Gordon and Burch 1974, p. 19)?

Most of the teachers begin their professional lives with the expectation that they will experience feelings of joy and accomplishment, but instead find that teaching is a demanding job which requires endless investment of time and energy. Teachers must devote a maximum effort in order to accomplish the long-term goals of their teaching, that is, to ensure that students eventually learn necessary life skills and become self-reliant. In so doing, teachers must have a strong commitment and sense of responsibility for carrying out their work. Teachers' responsibilities may be the most arduous burden of their lives. They are not only responsible for instruction; they are also expected to perform such roles as counselor, disciplinarian, clerk, and many others. The public demands not only teachers' accountability but also expects them to live with the forced-choice norms which were set up by the public.

> Parents can freely choose their parenting style, and independently decide what kind of teachers they will be with their own children. Not so with teachers, their freedom of choice is significantly limited by institutional or organizational factors; teachers are members of an organization whose norms, rules, policies, prohibitions, and job definitions strongly influence how they respond to students and how they teach them (Gordon and Burch 1974, p. 307).

The public has all too often overlooked the needs of teachers as human beings. They are working constantly in an atmosphere of evaluation, judgment, and fear. The combination of these factors surely frustrates teachers. A persistent feeling of frustration leads to a condition of fatigue, physical and emotional, which is now called "burnout." Gann (1979) said that burnout may be related to monotony, depression, and/or job dissatisfaction; but the concept of burnout is not equivalent to any of these concepts.

In an interview with Cary Cherniss reported in the article "Job Burnout: Growing Worry for Workers and Bosses" in the February 1980 issue of United States News & World Reports, Inc., burnout was said to be the situation where a person has experienced high levels of stress and has not been able to cope with it. Cherniss, an assistant professor of psychology at the University of Michigan, pointed out that such a person gets more and more discouraged and finally just gives up and withdraws from things. Ayala Pines (cited in Hendrickson 1979), a social psychologist, described burnout as physical, emotional, and attitudinal exhaustion. LeRoy Spaniol (cited in Reed 1979), an assistant professor of rehabilitation counseling, defined burnout as the feeling of being locked into a job routine which disproportionately strikes those in the helping professions, for example, teachers, counselors, social workers. It is related to stress and can last for years. It is physically harmful to the individual and psychologically to all those around him or her. In the Cherniss interview on burnout, he hypothesized: "Perhaps the term crystallizes something that a lot of people have been feeling right along but have found it difficult to express" ("Job Burnout" 1980, p. 71).

The burnout syndrome has apparently expanded among those pursuing teaching careers more recently. Teacher burnout has been a major issue for several years. Many concerned organizations are now considering burnout a serious problem. They have been studying the problem and offering programs and workshops to help teachers overcome this syndrome.

The primary sign of teacher burnout as described by Pines (cited in Hendrickson 1979) is that teachers will have feelings of uneasiness and the joy of teaching begins to slip away permanently. Other signs include an increased use of drugs or alcohol, changes in self-concept that usually result in a lowering of self-esteem, increased psychiatric symptoms, the displacement of tensions and frustrations into the home environment, resulting in increased marital and familial conflict (Maslach 1977, Maslach and Jackson 1979). Other than that, there may be a feeling of exhaustion and fatigue, feeling physically run down, sleeplessness, depression, shortness of breath, quickness to anger, instantaneous irritation, and frustration (Freudenburger 1975, Scrivens 1979, Sparks 1979). Bardo (1979) also noted that a lack of commitment and the inability to take school seriously are signs of burnout. Its symptoms and their degree vary with each individual (Freudenburger 1975). Cherniss also said that burnout syndrome is contagious:

> Workers who burn out are likely to become cynical, negativistic and pessimistic; when they interact on the job with others who are under the same stress, they can quickly turn an entire group into a collection of burnouts ("Job Burnout" 1980, p. 72).

Burnout has been suggested as an important factor in relation to absenteeism, poor job performance, low worker morale, and high rate of employee turnover (Maslach 1976, Pines and Maslach 1978).

Edelwich and Brodsky (1980) stated:

> The costs of Burn-out in staff turnover do not have to be documented statistically; any social administrator knows them well. Every year, fields such as nursing, teaching, and social work suffer loss of hundreds of their dedicated and sensitive practitioners to occupational fatigue (p. 31).

Burnout syndrome thus has important consequences for teachers, students, school, and the society as a whole. The role of teachers becomes of prime importance since the psychological health of teachers, perhaps, will impact the future success of citizens of the country. In solving the problem of teacher burnout, the cooperation of the full community is required. McGuire (1979) stated: "If teachers do not get that support, the price may be more than the society can afford to pay" (p. 5).

Need for the Study

Since the burnout syndrome has been publicly articulated and studied for the last few years, it is time for all concerned individuals in the state of North Dakota to acknowledge this phenomenon. The writer believes that everybody intuitively knows about the consequences of this syndrome which are detrimental to both the personal health of school personnel and the future success of all students. Serious studies should be carried out in order to obtain the substantial evidence regarding the degree to which the burnout syndrome exists. The findings of such studies may be a significant stimulus for concerned authorities in responding to the problem. A determination to lessen the significant consequences of this syndrome should be made promptly. Serious efforts should be made to improve the related conditions which are contributing to the burnout syndrome.

Purpose of the Study

The purpose of this study is to investigate:

1. The extent to which the burnout syndrome exists among North Dakota public school classroom teachers

2. The significant factors which affect burnout syndrome as perceived by North Dakota public school classroom teachers

3. The determination of whether significant relationships exist among and/or between the following variables: age; sex; marital status; number of dependents; educational background; types of schools; the length of teaching experience; the average number of students in the classroom; the size of the community; and salary regarding the burnout factors of emotional exhaustion, depersonalization, personal accomplishment, and personal involvement.

Delimitations of the Study

This study will be limited to teachers in the public schools. It deals with factors which affect teacher burnout. It is focused upon full-time public school classroom teachers in the state of North Dakota. Other support personnel in the public schools, special education teachers, and non full-time teachers are excluded.

Since this study was conducted with public school classroom teachers in the state of North Dakota, its results cannot be generalized to all public school classroom teachers in other states. This limitation may be offset by similarities among the general population of public school classroom teachers in any given state.

Assumptions

The writer assumes that a random sample of 350 North Dakota public school classroom teachers is representative of the public school classroom teachers in the state of North Dakota. Because the data used in this study were collected through a survey questionnaire completed by North Dakota public school classroom teachers, it is assumed that respondents are truthful based on their experiences and perceptions. It is also assumed that the results of this study will suggest a valuable means of enhancing the knowledge of teacher burnout for the benefit of educational personnel in the state of North Dakota.

Definition of Terms

The following terms are defined as they apply to this research study:

Anxiety. A state of uneasiness and distress, apprehension, and worry which is caused by the individual's reactions toward unsatisfied needs.

Stress. A condition of physical and/or emotional strain which produces changes in the autonomic nervous system.

Tension. A condition of emotional strain which results from feelings of uneasiness and anxiety.

Burnout. A feeling of being trapped in a job routine which causes emotional, physical, and attitudinal exhaustion and cynicism.

Syndrome. Any complex of symptoms or characteristics which represent the existence of undesirable conditions for any individual.

Public school. Any educational institution where regular compulsory education is provided for students from first grade

through twelfth grade. The institution is financially supported by public funds.

Public school classroom teacher. Any teacher who teaches in the classroom of a public school. Non full-time teachers, special education teachers, and other support personnel in public schools are not included.

Hypotheses

The following null hypotheses were identified for testing:

Null hypothesis 1. There are no significant relationships among the burnout factors of emotional exhaustion, depersonalization, personal accomplishment, and personal involvement related to the perceptions of the public school classroom teachers.

Null hypothesis 2. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of emotional exhaustion related to public school classroom teachers.

Null hypothesis 3. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of depersonalization related to public school classroom teachers.

Null hypothesis 4. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in

the classroom, salary, educational background, and size of community with the burnout factor of personal accomplishment related to public school classroom teachers.

Null hypothesis 5. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of personal involvement related to public school classroom teachers.

CHAPTER II

REVIEW OF RELATED LITERATURE

The purpose of this chapter is to review the literature of teacher burnout emphasizing the evolution of the term used. The literature will be examined from 1900 to the present. The related studies on teacher stress are also included. The effects of the burnout syndrome and the current movements toward the remediation of the syndrome will also be discussed.

Teacher Burnout: A Historical Perspective

Teacher burnout is a term currently used to describe teachers' feelings and attitudes toward themselves in relationship to their work. The concept of teacher burnout is not new to teachers and others in education. The well-being of teachers has always been one of the major concerns of educators and their professional organizations. In the early 1900s, teachers' health was a major interest of educators and researchers. Consequently, teacher absence had been extensively studied in order to find out if it had some relationship to teachers' health. Carrothers (1924, 1927) had studied several variables related to teacher absence due to illness in Cleveland, Ohio, and in Springfield, Massachusetts. He examined such absence with regard to sex, age, type of subject, type of pupil, and days of the week taught. He reported no relationship

between the amount of illness and those variables. The absence for illness was greater among married than single women and greater among single than married men. Also, the younger teachers had greater amounts of recorded sickness than the older ones.

Rogers (1926) reported that the most frequent causes of teachers' illness were diseases of the respiratory system and laryngitis. Illness caused by digestive disorders was less common among teachers than those who were in other professions.

In the 1930s, the mental health of teachers became a major topic of interest for educators and educational researchers. Patry (1932) defined mental health as an individual's ability to adjust to life with satisfaction, success, and happiness. Hicks (1931) also studied mental health as a topic of concern and as a real problem. It was found in his study that of the 602 cases of absence of teachers studied, 339 were listed as normal, 132 were definitely psychopathic, and an additional 131 revealed psychopathic tendencies. More than 11 percent of the 602 teachers studied had had nervous breakdowns. Based on his study, he concluded that the economic depression, increased teaching loads, and increased financial strain were some of the major causes of teacher sickness.

During that same period in time, Mason (1931) studied seven hundred teachers who were so maladjusted to social life that they had been admitted to hospitals as mental patients. He found that teachers had been committed to hospitals at an age earlier than that of the general population, and single teachers were more subject to mental illness than those who were married. Hicks (1933) also found from the reports of six hundred teachers that 20 percent of the

women teachers were unduly nervous, 11 percent had had nervous breakdowns, 50 percent took no daily exercise, 12 percent reported they were anemic, 7 percent had lung trouble, and 7 percent had had heart disease. An additional finding of interest was that psychoneurotic conditions were found to be twice as prevalent among women teachers as among men teachers. Studies done by the National Education Association (1938), Prescott (1938), and Towsend (1938) reported that the underlying causes of physical and mental ill health among teachers could be classified as being of an environmental or occupational character or of a more personal type. Moreover, conditions of unemployment, inadequate recreational facilities, occupational insecurity, lack of social prestige, and inadequacy of financial returns represented the major environmental factors contributing to teacher maladjustment. Daldy (1937), who studied adaptability in a group of teachers, reported that emotional immaturity, lack of adaptive ability, absence of interesting hobbies, and idiosyncrasies resulting in frictions with associates were listed as some of the more important personal causes of mental ill health.

Even though World War II reached its climax and finally ended in the middle of the 1940s, the war's effects left the world weary, cynical, and struggling to resume a peacetime pattern. However, there was still a seething restlessness and a bitter and irritable distrust among individuals, groups, and nations. The trend in mental hygiene had changed dramatically from emphasizing the problem of military selection and the development of emergency and short forms of treatment for psychiatric casualties to the more and subtle problem of interpersonal relations under postwar conditions. During that period in time, welfare, morale, and social standing among

teachers became the interest of both educators in general and individual teachers.

In the period of the 1940s, studies of teacher personality and mental hygiene were still primarily concerned with the effect of the teacher's behavior upon the pupils. Later on, the number of studies which attempted to investigate the extent of maladjustments in teachers by means of personality tests, such as the Minnesota Multiphasic Inventory and the Multiple Choice Porsch Test, decreased. At the same time, discussions by educators and researchers about teachers were concerned more with the conditions surrounding the job than with the mental hygiene aspects of teachers' work. However, job-associated frustrations were considered one of the chief factors causing dissatisfaction among teachers and contributing to a lack of security in their work (Hessel and Symonds 1949). According to Hessel and Symonds (1949), there were other problems in the occupation itself such as pupil load, undemocratic practices of supervisors and administrators, poor working conditions, inadequate sick leave benefits, and too many extracurricular demands which infringed upon the teachers' time. Moreover, community restrictions upon social life and encroachment upon academic freedom had made the teaching profession one filled with occupational hazards. Several surveys were conducted concerning teacher morale. An article, "Teacher Morale Is Improving but Gains May Be Secondary," which appeared in the March 1948 issue of The Nation's Schools showed the results of a nationwide survey of public school administrators. According to the survey, the following factors were considered significant in improving teacher morale: (1) higher salaries, 90 percent; (2) establishment of definite salary schedules, 42.2 percent;

(3) better qualified teachers, 37.2 percent; (4) better staff relationships, 32.8 percent; (5) more nearly adequate facilities and equipment, 19.4 percent; (6) improve physical environment, 17.8 percent; (7) lighter work load, 15 percent; and (8) tenure or continuing contract, 10.6 percent.

In the 1950s and the 1960s, the concern about mental health emerged again among educators and researchers. Jahoda (1950) pointed out that mental health was not new in education. Davis (1949) and Seeley (1953) described the criteria of a mentally healthy person as (1) a person who ordinarily is not in conflict; (2) a person who was in the conflict and had skills for solving the conflict rationally; (3) a person who was in the conflict and was unable to solve the matter rationally but who had strong enough personality organization to be able to withstand the tension; and (4) a person who might be unable to withstand the tension but instead resorted to defensive compromises, provided the mechanisms used were those that yielded relatively mild distortions and provided they were not employed in the most extreme degree. During that period, the interest of educators and researchers was not only about mental health but also about teacher morale. At that time, it appeared that there were many researchers studying teacher morale. Harap (1959) summarized studies made in twenty school surveys. He found that the most common causes of poor morale were inadequate salary, large classes, poor administration, lack of a daily period of relaxation, unsatisfactory plant, and lack of teaching materials and equipment. Redefer (1959) also reported a summary of opinion questionnaire studies in which five thousand teachers in twenty-four systems participated. He concluded that

action to improve teacher morale should be concentrated on (1) board of education and administrative relations, (2) personnel practices and policies, (3) provision for adequate school equipment and supplies, and (4) educational leadership. Davis, Ware, Shapiro, Donald, and Stieber (1963) summarized research on teacher morale, opinions, and attitudes between 1958 and 1963. They identified six major findings:

1. Morale is a general function of a multitude of interrelated variables and dimensions rather than a function of one or more isolated variables. However, the absence of adequate instruments that are anchored to a comprehensive theoretical conceptualization of morale limits the extent to which research can be done effectively.
2. The immediate supervisor or administrator is extremely important to a teacher's morale. Democratic administration can offset the effects of other factors that tend to produce low morale.
3. Congruity or lack of congruity of perceptions and expectations of school boards and teachers is extremely important to teacher morale.
4. Administrators and teachers frequently have a very different view of the level of morale and what is important to teachers' morale. The greater the discrepancy between their expectations, the lower the morale.
5. Preparation programs for teachers are inadequate to the extent that they either develop or fail to change unrealistic attitudes about teaching--a circumstance that may result in disorientation for beginning teachers as well as in reduced morale.
6. Research needs to be done on the relation of morale to teacher performance and to personnel policies and practices (p. 411).

In the 1970s, the concern about teachers' well-being was increased. The problem of teacher anxiety was studied extensively from both the sources of anxiety and their consequences. Concern and/or worry was considered the major source of teacher anxiety and it had a negative impact on the achievement of both teachers and students. Sarbin (1968) reported that the term "anxiety" was used metaphorically to denote an experience similar to a tense, choking

sensation. Coates and Thoresen (1976) also indicated that anxiety might be termed stress or tension responses experienced directly by the person cognitively, motorically, or physiologically in response to specific life situations. The self-management of stress and tension has been developed in order to help teachers know how to avoid the undesired behaviors resulting from stress. Stress is a phenomenon everybody experiences to one degree or another in his or her life and job (Ingram and Goodman 1980). The feeling resulting from prolonged stress and the failure to learn how to reduce this stress was described as "burnout." The term burnout was first used by Freudenburger during the seventies to describe workers' responses in an alternative health care setting (Gann 1979, Edelwich and Brodsky 1980). Burnout is considered a "new phenomenon" which is well known among professionals. The term is increasingly coming into use. Some definitions of burnout, provided by experts, follow:

> Loneliness, isolation, frustration, hopelessness, helplessness, feeling of being trapped and unable to significantly effect change-all contribute to stress and, eventually, to the burnout syndrome . . . (Sullivan 1979, p. 112).
>
> By definition, burnout is a condition caused when a person works too hard for too long or endures too much stress over a short period of time (Sammons 1980, p. 15).
>
> A wearing out, exhaustion, or failure resulting from excessive demands made on energy, strength, or resources (Daley 1979, p. 375).
>
> [Burnout is] a condition that results from stress, tension, and anxiety in its victims. It is caused by the many horrendous problems that plague teachers and that they receive little help in dealing with (McGuire 1979, p. 5).
>
> It refers to a progressive loss of idealism, energy, and purpose experienced by people in the helping professions as a result of the conditions of their work. Those conditions range from insufficient training to client overload, from too many hours to

> too little pay, from inadequate funding to ungrateful clients, from bureaucratic or political constraints to the inherent gap between aspiration and accomplishment (Edelwich and Brodsky 1980, p. 14).
>
> Burnout is a complex process which shows itself in two related ways. First, it is physical. Second, it may be psychological as well. Physically, burnout is characterized by a loss of energy and vitality, a feeling of being run down, and easily tired. Psychologically, burnout is characterized by boredom, distrust of and cynicism toward new ideas, and a decline of empathy and compassion for others (Medeiros, Welch, and Tate 1980, p. 7).

Medeiros et al. (1980) discussed the burnout syndrome and concluded that there are five beliefs that may lead to burnout in teachers:

> Belief No. 1. I have to like everybody and everybody has to like me.
> Belief No. 2. Everyday has to be a good day.
> Belief No. 3. The current criticisms of education are true.
> Belief No. 4. Nobody cares but me.
> Belief No. 5. The past is better than the present (pp. 7-8).

They also discussed their perception that those beliefs could not be justified and did not match with human experience. Those altrustic beliefs could be aggravated by additional pressures from administrators, parents, and trends which demean the role of teachers in modern society.

Freudenburger (1975) identified three personality types as being more prone to burnout. One is the individual who had the need to succeed and feel successful. This person felt that need through his/her work. If the work situation became unsatisfactory, he/she worked harder, thinking that would be the solution but, in most cases, it was not. Another type of personality was the overcommitted person. This type of individual can be a joy to all of those who he/she worked with because he/she accepted tasks readily, approached problems enthusiastically, and was keenly interested in promoting

his/her employer and his or her self. He/she was regarded by those around him/her as competent, creative, and caring. The trouble begins when he/she gets overwhelmed by his/her own enthusiasm. The third personality type susceptible to burnout was the individual who so needs to be in control that he/she believes no one else can do any job as well as he/she can. This type of person refused to delegate authority and never admitted he/she needed help. According to the special report, "Teacher Burnout: How to Cope When Your World Goes Black" which appeared in the January 1979 issue of Instructor, LeRoy Spaniol classified burnout into three levels:

1) First-degree burn (mild): short lived bouts of inability, fatigue, worry, frustration
2) Second-degree burn (moderate): same as mild but lasts for two weeks or more
3) Third-degree burn (severe): physical ailments occur such as ulcers, chronic back pain, migraine headaches, and so on (p. 57).

McGuire (1979) reported that since teacher burnout was a condition resulting from stress, tension, and anxiety in its victims, stress and burnout could not be separated from each other. McGregor (1981) stated that stress was becoming a serious occupational hazard for teachers in almost all countries and has produced a condition described by doctors as burnout. Selye (1956) defined stress as the sum of all nonspecific effects of factors which can act upon the body. McGrath (1976) defined a stressful situation as one in which it is perceived as leading to some undesirable state of affairs if left unmodified (or some desirable state of affairs if modified) whether the perception is accurate or not. Kyriacou and Sutcliffe (1978) studied teacher stress and argued that personality characteristics rather than biological characteristics of the individual may be the important determinant of individual

differences in teacher stress. Coates and Thoresen (1976) reviewed the literature on teacher anxiety looking particularly at sources of teacher concern. It appeared that work overload such as planning lessons, grading papers, and finding time for remedial work had been linked as much as any other factor to teacher anxiety. Other factors included the performance of teachers under difficult situations such as when the teacher has to meet individual student needs, balancing "no failure" policies with insuring minimum standards.

Crime in schools has emerged as a major potential source of teacher stress. The National Institute of Education Safe School Study found in 1978 that fifty-two hundred of the nation's teachers were physically attacked at school within a month's time. Nearly one-fifth of the attacks required medical treatment. The National Institute of Education also found a relationship between class size and teacher victimization. The higher the average number of students in classes, the higher was the teacher's risk of being attacked and robbed. The study reported that teachers with high proportions of low-ability students, underachievers, behavior problems, and minority students were more likely to be victims. Teachers who had been victimized were more likely to assess their schools and students negatively. On the basis of the National Institute of Education study, it was concluded that these negative assessments probably reflected the reality.

In 1977, the Chicago Teachers Union conducted a survey on teacher stress and the results indicated that approximately 50 percent of the respondents indicated that they had experienced physical illness as a result of their job, and about 25 percent of

the respondents indicated that they had experienced mental illness associated with their work ("CTU Survey Pinpoints Stress" 1978). The report also showed that there were no significant differences between sub-groups compared in this study which means that regardless of sex, age, race, or type of school teachers perceive stress associated with teaching in highly similar ways.

In 1979, the New York State United Teachers conducted a survey on teacher stress and some of the major findings were:

> Teachers report the two most stress-producing factors in schools today are Managing "Disruptive" Children and Incompetent Administrators - Lack of Administrative Support.
>
> Urban elementary and urban high school teachers report higher stress than any other respondent groups in the study.
>
> Urban teachers report over three times more items as stressful than do rural teachers, and almost twice as many items as suburban teachers.
>
> The 31 to 40 year old teachers appear to be under greatest stress, with the 41 to 50 year old teachers reporting only half as many items as stressful, and teachers over 50 reporting even fewer items (New York State United Teachers 1979, p. 2).

The Florida Education Association/United conducted a survey on teacher stress and teacher attitudes in 1980. The survey questionnaires were sent out to randomly selected Florida teachers. The results of the study revealed that teaching was either very stressful or extremely stressful. The findings indicated that a significant number of Florida's teachers experienced large amounts of job stress and there was little association between biographical characteristics of teachers and the incidence of job stress. The most common sources of job stress included inadequate salary, student discipline, and the large amount of paperwork required of teachers. The result of the survey on teacher attitudes also revealed that the cause of teachers'

job dissatisfaction were similar to the causes of teacher stress. Additionally, the findings regarding teacher stress caused the Florida Education Association/United to conclude that the most common symptoms of job stress experienced were exhaustion and frustration.

Since the 1970s, very few studies about teacher burnout have been conducted. Metz (1979) studied the characteristics of educators who rated themselves as professionally burned out to discover the common characteristics of those who were professionally renewed. The results of the study indicated that the burned-out educators and the renewed educators were more alike than different in characteristics, but some differences did exist. Those differences were: (1) educators who rated themselves as renewed could identify many diverse sources of renewal and indicated the importance of their personal lives as a major source of professional renewal; (2) the group of males, aged thirty to forty-five, were burned out more than other age groups; and (3) the renewed educators perceived "administrative support" and "peer interaction and relationships" as significant sources of renewal. The major sources of professional burnout as described by Metz (1979) included administrative incompetence, bureaucratization, discipline problems, lack of administrative support, lack of positive feedback, lack of opportunity for change by choice, and powerlessness. The major sources of professional renewal were also identified in this study. They included administrative support, enthusiastic colleagues, freedom and responsibility to plan and create within the system, good communications, individually initiated changes, motivated students, personal life, positive feedback, power in decision making, student achievement, and vacations.

Westerhouse (1979) studied the effect of tenure, role conflict, and role conflict resolution on work orientation and burnout in high school teachers. In this particular study, it was found that the most frequent conflicts for teachers were with students. She also reported that the majority of teachers employ adaptive strategies, especially compromise, to resolve role conflicts; and approximately 78 percent of the time teachers allocated for their jobs was spent on professional activities. Burnout was reported to be comparatively low for this sample of teachers. Significant relationships were not observed between work orientation and tenure or role conflict and burnout. Based on Westerhouse's study, there was not an important relationship between tenure and burnout.

Otto (1980) further examined the phenomenon of professional burnout and how to alleviate or avoid it. The results indicated that burnout was a recognizable phenomenon and burnout susceptibility was related to personal dispositions rather than situation factors such as specific work setting, age, or time on the job. The results also indicated that causes of burnout were primarily due to personal reactions to perceived problems and the organization milieu. A most interesting finding in Otto's study was that avoidance techniques were equally the responsibility of the person and the organization, but treatment techniques were almost exclusively the responsibility of the organization. The suggestion for institutions of higher education and individual school districts, studied by Metz (1979), was that they alert both preservice and inservice teachers to the possibility of professional burnout and to the ways of preventing and coping with the phenomenon.

The Effects of Burnout Syndrome

A major concern for most human beings has been the maintenance of sound physical and psychological health. The understanding of human relationships and the interactions between one individual and another have generally been considered primary goals in educating young people (Randall 1964). In order to achieve these goals of education and help the school function effectively, teachers have been the key persons in the process. This has implied that teachers must be physically, socially, emotionally, and mentally well. But, teaching is a stress-related job. The prolonged stress and lack of coping skills lead to "burnout syndrome" ("Job Burnout" 1980). Burnout is a phenomenon which has a tremendous impact upon individuals both physically and psychologically. Sammons (1980) has stated:

> For generations, Americans have been telling their children that "nobody ever died from working hard." Now, we all know better. Physicians and researchers have found that people, like machines, "burn out," and when they do, they cease to operate. If people are forced to function beyond their normal capacity, they may suffer great damage (p. 15).

The detrimental consequences of burnout syndrome have affected not only the particular burned-out teachers but also others who are around them, especially students, fellow teachers, administrators, and other educational personnel. Randall (1964) has said that the emotional illness of teachers is hazardous to the developing personalities of the young. Bentz, Hollister, and Edgerton (1971) also expressed the belief that maladjusted teachers have always had an influence, good or bad, on the emotional development of their students. According to Medeiros et al. (1980), burnout syndrome can affect the individual teacher's life at least in five major ways:

1. Physical. Burned-out teachers generally felt exhausted, which carried over from school to home. The syndrome could cause physical ailments. Those ailments, if unchecked, might result in ulcers, colitus, asthma, or they might cause loss of appetite or loss of sexual interest. Consequently, physical ailments might have decreased teaching effectiveness

Miller (1979) also stated that some of the recognizable physical symptoms of burnout included fatigue, headaches, backaches, indigestion, and constipation. Hendrickson (1979), too, listed dizziness, frequent colds, and diarrhea as some of the more common physical ailments.

2. Intellectual. Burnout syndrome hurts teachers intellectually in both the thinking and problem solving areas. Creativity might be diminished and this could carry over from teaching to non work-related matters. The burned-out teacher might also have cynical attitudes toward incidences or problems they were facing

3. Emotional. Pessimism or optimism about life may be reflected in the emotional stability of the teacher. One of the common symptoms of burnout syndrome has been the feeling of helplessness which results from the loss of one's dreams and expectations. This feeling of loss may have occurred as a result of teachers over investing energy in their teaching; and when their teaching job began to go poorly, then their lives which consisted chiefly of their work began to go poorly too. Other emotional effects of burnout syndrome were evidenced, for example, boredom, distrust of and cynicism toward new ideas, and a decline of empathy and compassion for others (Medeiros et al. 1980). Sammons (1980) also stated that quickness to anger was one of the emotional effects of burnout syndrome

4. Social. Teachers have felt that there was nobody with whom they could share their feelings and they did not want to burden someone else with their problems for fear of rejection or imposition upon others. Thus, the burned-out teacher has encountered a self-imposed isolation

5. Spiritual. This refers to the psychological concept of whether dreams and expectations could be fulfilled. Creativity, adaptability, and vitality appear to have vanished and the meaningfulness of life is questioned, creating low morale

Remediation of Teacher Burnout

The burnout syndrome may be a major factor in the destruction of the teacher's mental health. Teacher burnout affects not only teachers but also the emotional development of the child. Bentz et al. (1971) have stated:

> The importance of mentally healthy teachers in the classroom cannot be overstated. The teacher's influence is far-reaching and must be viewed as a force secondary in importance only to the home in the development of a child's personality. For just as parental attitudes influence the emotional development of a child, so do those of the teacher (p. 72).

Teachers are perhaps the most important individuals in the classroom. They are the ones who adapt the environment and atmosphere of the classroom to meet the needs of developing children and to give a feeling of worth and to help the students realize their "best." Since teachers have such an important role in educating children and teacher burnout is a widespread syndrome and often very debilitating, the problem of teacher burnout has been one of the major concerns of professional organizations for the past few years. Methods of preventing and reducing teacher burnout have been suggested by experts. The educational organizations are also aware of these

potential solutions. Workshops and other projects were initiated by professional organizations, such as the Northwest Staff Development Center (Sparks 1979) and the New York State United Teachers ("Trained to Help" 1980), and have been accepted among teachers as a source of help.

Teacher burnout is truly a problem that cannot be solved solely by the particular individual teachers. It requires the responsibility and the cooperation of all concerned individuals--teachers, administrators, the school board, and the community. The educational institution where teachers are trained should share the responsibility for this problem too. The problem of teacher burnout has never been fully and directly addressed by professors. Many professional educators urge that professors should stop the cycle of traditional education in the college classroom and prepare students for the reality of their future career. Lueck (1965) stated:

> A university that educates prospective teachers is responsible for providing them with adequate skills, knowledge, and understandings so that their first teaching experience will be successful. Attaining this goal should be a primary task of courses in methods of teaching (p. 119).

Wansart (1980), a teacher who suffered burnout and temporarily left the profession, also stated:

> I would suggest one simple solution. Instead of having an adviser that a student sees occasionally throughout his undergraduate program to decide on courses and occasionally talk about personal things, students should be assigned to an advisement group that would meet, perhaps bi-weekly. This group would meet, intact, throughout the four years. Its objective would be to handle the more logistical problems of course selections, etc., and in addition, to develop a long-term seminar, if not counseling group, to interrupt the cycle I've described. Why not a little movement toward self-actualization in college. Deal with it directly. College students have feelings too, and usually, they are ready for it. Well, it sounds good, but there are omnipresent problems. Will the university instructors/professors have the skills to lead groups? Are they self actualizing themselves? Do they care about it? Will colleges be interested (p. 6)?

Apparently, colleges and universities must ask themselves if their highly publicized projects, centers, and institutes are contributing to broad solutions of the problems or are they merely holding actions with little effect. Adams (1975) stated that teacher education programs are often strong in the rhetoric of idealism but weak in the development of the skills which are necessary to move toward the ideal.

Teacher burnout is seemingly an individual phenomenon; whereas the most significant underlying elements in preventing and reducing teacher burnout are teachers' attitudes which relate to effective living in general, concerning self-awareness, self responsibility, and self acceptance (Sharon 1980). Sharon (1980) suggested that the essential first step in dealing with burnout was to recognize and admit that it exists. Teachers should be willing to assume self responsibility by acknowledging their own roles in engendering burnout; rather than blaming others or the system, they must accept the need to take a personal initiative in resolving the problem. Constructive coping with daily and persistent stress is also one of the primary means of preventing burnout. Hendrickson (1979) has proposed some interesting ways to help teachers combat burnout. Learning to relax on a regular basis is one of the ways she proposed. Exercising on a regular schedule; eating a balanced, nutritious diet; having interests outside of school; stroking themselves for their successes; periodically examining the motivation for teaching; taking time off, being sure that the expectations are realistic; and trying something new and creative in teaching are also suggested. Crescimbeni and Mammarella (1965) recommended that teachers should maintain a sense of humor. They suggested that a failure to do so could

turn a teacher into a narrowminded, humorless milquetoast. In addition to these suggestions, attending or conducting various nonprofessional classes and workshops and returning to college to pursue an advanced degree or to expand professional skills or areas of expertise were suggested as a systematic and formal way of increasing stimulation, self-esteem, and sense of competence which dissipates burnout. Freudenburger (1975), Daley (1979), Gehrke (1979), Moe (1979), Reed (1979), Alschuler (1980), and Gallegos (1980) also suggested similar ideas to overcome teacher burnout.

The problem of teacher burnout will be easier to solve if administrators understand its nature and are willing to cooperate with other teachers and other concerned organizations. Sharon (1980) stated:

> Administrators at all levels can assume a significant role in relieving teacher burnout. Burned out teachers benefit considerably from the compassionate understanding, patient acceptance, and palliative measures manifested by administrators who are thoroughly familiar with the burnout syndrome. Moreover, such qualities as caring, openness, creativity, and charisma on the part of school officials can serve in a preventive capacity (p. 28).

Some of the useful administrative guidelines for helping teachers with burnout problems were cited in a news article appearing in the 11 October 1979 issue of The Daily Sentinel-Tribune, Bowling Green, Ohio, as follows:

> ALLOW teachers to switch classrooms, grades, subject areas and curriculum.
> BUILD self esteem by complimenting teachers on the way they run their classrooms or handle difficult students.
> VISIT teachers systematically before or after school for a few minutes of social chatter.
> INVOLVE many teachers in the decision-making process, both formally and informally.
> COMMUNICATE through group discussions, retreats away from school, informative bulletin boards, newsletters, etc.
> OFFER inservice courses teachers really need and in which they can get new ideas from outside the school.

> PROMOTE well being by making sure teachers have access to school athletic facilities, good food and "breathing room" when they are under stress.
>
> GIVE released time in the form of sabbaticals, exchange programs, fellowships and grants.
>
> RELATE to teachers as human beings rather than interchangeable parts of an instructional organization.
>
> SELECT an ombudsman to whom teachers can talk about any problem and expect some assistance or understanding.
>
> TAKE a task off the list of teacher's duties whenever one is added.
>
> INCREASE links between school and home.
>
> WATCH for signs of burnout in themselves, because burned-out supervisors are another cause of burned-out teachers (Fox and Chamberlin 1979, p. 14).

Some other things that the administrators should take into consideration for preventing and reducing the problem of teacher burnout include the clarification of job descriptions of teachers and the length of faculty meetings (Sharon 1980).

Teaching is a stress-related job. Educational organizations are now concerned about its consequences. Sparks (1979) reported that the Northwest Staff Development Center (NSDC), a federally funded teacher center in Michigan, has developed a program to address the issue of teacher stress and burnout. The Northwest Staff Development Center has offered a series of workshops on the theme of Prevention and Management of Educational Stress which includes Stress and the Classroom Teacher, Stress and the School Administrator, Time Management for Educators, Relaxation Techniques, Human Potential, Group Problem Solving, and Career Change. The goals of the workshops are to reduce the isolation that many teachers experience, to identify the sources of job-related stress, to identify professional strengths and successful work experiences that participants can draw on to increase their satisfaction with teaching, and to form a plan to prevent or alleviate distress. Similar workshops have also been offered for teachers throughout the country by local professional

organizations.

The New York State United Teachers (NYSUT) has successfully initiated Project TEACH ("Project 'TEACH'" 1980). Project TEACH is a workshop which presents proven classroom management strategies and allows teachers to choose those which best suit their own teaching style. Facilitators were selected from teacher applicants throughout the state and trained by Joseph Hasenstab, who developed Project TEACH. The positive aspects of Project TEACH are that it gives a positive approach and helps teachers to be aware of their own behaviors.

Efforts have been made by many professional organizations and their officials to help teachers prevent and alleviate burnout throughout the country. The remediation of teacher burnout definitely requires the responsibility and the initiative of the individual teacher. Even so, such efforts seem likely to fail without cooperation from administrators who could provide aid in conducting appropriate training for reducing the problem.

CHAPTER III

METHODOLOGY

This chapter contains an explanation of the methods and procedures used in this study. It includes the selection of the population and subjects, the survey instrument, and the treatment of the data.

Selection of Population and Subjects

The population for this study was the public school classroom teachers in the state of North Dakota. They were randomly selected from the list of public school classroom teachers provided by the Department of Public Instruction, Bismarck, North Dakota. Questionnaires with an enclosed self-addressed, stamped envelope were sent out to 350 randomly selected public school classroom teachers throughout the state during the second week of April 1981. The participants were assured that their responses as individuals would not be identified. By the end of April 1981, 196 responses (56 percent) were returned.

A telephone follow up was made to those public school classroom teachers who failed to respond to the initial questionnaire after the end of April 1981. Twenty-eight questionnaires and enclosed self-addressed, stamped envelopes were sent out again to those who had not received the original mailing or who requested that

it be sent again. By 17 May 1981, which was the deadline for accepting the returning questionnaires, 284 responses (81.14 percent) were returned. However, only 246 responses could be used because some of the questionnaires were incomplete. Even though 38 responses were discarded, the percentage of usable responses was still 70.29.

Survey Instrument

The instruments to be completed by the public school classroom teachers included a demographic data sheet and the Maslach Burnout Inventory (MBI). These instruments are found in appendix A along with a letter providing permission to use the inventory. The Maslach Burnout Inventory was selected for use in this study because it was the only available instrument which has been intensively tested. Moreover, the validity and reliability of the instrument seemed substantial.

The Maslach Burnout Inventory, authored by Christina Maslach and Susan E. Jackson (n.d.), was designed to assess various aspects of the burnout syndrome. It has four sub-scales: emotional exhaustion, depersonalization, personal accomplishment, and personal involvement. Items were written in the form of statements about personal feelings or attitudes. Each statement was rated on two dimensions--frequency and intensity. The frequency dimension was checked on a six-point scale that ranges from one ("a few times a year or less") to six ("every day"). A separate box was checked if the respondent never experiences the feeling or attitude described. The intensity dimension was checked on a seven-point scale ranging from one ("very mild, barely noticeable") to seven ("major, very strong") and was not completed if the respondent checked "never" on the frequency scale. A high degree of burnout was reflected through a high mean

score on the emotional exhaustion sub-scale and the depersonalization sub-scale. Conversely, a low mean score on the personal accomplishment sub-scale indicated a high degree of burnout.

The author indicated that the personal involvement sub-scale was presented in the Maslach Burnout Inventory as optional since the eigenvalue was less than unity. It was still retained because it has proved to be an interesting variable in other research on burnout (Maslach n.d.).

The Validity and Reliability of the Instrument

The Maslach Burnout Inventory was administered to a wide range of human services professionals. Various psychometric analyses showed that the scale has both high reliability and validity as a measure of burnout (Maslach n.d.). In the discussion of reliability and validity, Maslach (n.d.) offers the following data:

> Data on the internal consistency of the MBI were obtained from the same sample (n = 1025) that was used for the factor analysis. Internal consistency was estimated by Cronbach's coefficient alpha, which yielded reliability coefficients of .76 (frequency) and .81 (intensity) for the 22-item scale (deleting the optional subscale of Personal Involvement). The reliability coefficients for the subscales were .89 (frequency) and .87 (intensity) for Emotional Exhaustion, .77 (frequency) and .77 (intensity) for Personal Accomplishment, and .76 (frequency) and .75 (intensity) for Depersonalization. The split-half reliability coefficients for the entire scale are .74 (frequency) and .81 (intensity). Thus, the internal reliability of the MBI is quite high.
>
> Data on test-retest reliability of the MBI were obtained from a sample of graduate students in social welfare and administrators in a health agency (n = 53). The two test sessions were separated by an interval of 2-4 weeks. The test-retest reliability coefficients for the subscales were .82 (frequency) and .53 (intensity) for Emotional Exhaustion, .80 (frequency) and .68 (intensity) for Personal Accomplishment, and .60 (frequency) and .69 (intensity) for Depersonalization. All of these coefficients are significant beyond the .001 level. Thus, the MBI appears to be quite stable over time.

Validity

Concurrent validity

Concurrent validity was demonstrated by correlating an individual's MBI scores with behavioral ratings made independently by a person who knew the individual well, i.e. one's spouse or a co-worker. In addition, MBI scores were correlated with the presence of certain job characteristics that were expected to contribute to experienced burnout.

The spouse data were collected via a questionnaire survey of 130 policemen and their wives (Maslach & Jackson, 1979). The wives were asked to rate their husbands on several behaviors predicted to be reflective of the various dimensions tapped by the MBI. These ratings were compared with the husbands' MBI scores, and the resulting correlations were in line with the predictions. Thus, police who scored higher on the Emotional Exhaustion subscale were rated by their wives as coming home feeling: upset and angry (r = .34, p <.001,[1] tense or anxious (r = .27, p <.001), physically exhausted (r = .20, p <.01), complaining about problems at work (r = .29, p <.001), and not in a cheerful or happy mood (r = -.19, p <.02). Police who scored higher on the Personal Accomplishment subscale were rated by their wives as coming home in a cheerful or happy mood (r = .25, p <.003) and as doing work that was a source of pride and prestige for the family (r = .25, p <.004).

The co-worker data were collected from a sample of 40 mental health workers, each of whom completed the MBI and an anonymous behavioral evaluation of a designated co-worker. Thus, these were two assessments of each participant--one made by oneself and the other made by a co-worker. As predicted, people who were rated by the co-worker as being emotionally drained by the job scored higher on Emotional Exhaustion (r = .41, p <.005) and on Depersonalization (r = .57, p <.001). Furthermore, people who were rated as having become more emotionally drained by the job over time also scored higher on Emotional Exhaustion (r = .48, p <.001) and Depersonalization (r = .32, p <.03). People who scored high on Depersonalization were rated by co-workers as complaining frequently about clients (r = .33, p <.02) and those who scored high on Emotional Exhaustion were rated as having come to evaluate clients more negatively over time (r = .33, p <.02), as had been predicted.

Finally, it had been hypothesized that the presence of certain job characteristics would be correlated with high MBI scores. Relevant data were collected from a sample of 91 social service and mental health workers who had completed both the MBI and the Job Diagnostic Survey (JDS) (Hackman and Oldham, 1974, 1975). The latter measure includes an assessment of certain "core" job dimensions. One of these, "feedback from the job itself," measures the degree to which carrying out the required work activities (e.g. contact with clients) gives the employee direct and clear information about job performance. As had been predicted from earlier research on burnout (Pines & Kafry, 1978), higher scores on this job dimension were correlated with lower

scores on Emotional Exhaustion (r = -.38, p <.001) and on Depersonalization (r = -.44, p <.001). "Dealing with others" assesses the degree to which the job requires the employee to work closely with other people (other employees or clients) in carrying out the work activities. As predicted, high scores on this job dimension were correlated with high scores on Personal Involvement (r = .32, p <.001), but the correlation with Emotional Exhaustion fell short of statistical significance (r = .15, p <.10). Another job dimension, "task significance," is the degree to which the job has a substantial impact on the lives or work of other people, and high scores on this job characteristic were correlated with high scores on Personal Accomplishment (r = .19, p <.05), as predicted. Finally, the JDS subscale of "experienced meaningfulness of the work" assesses the degree to which the employee experiences the job as one which is generally meaningful, valuable, and worthwhile, and, as predicted, higher scores on this subscale were also correlated with Personal Accomplishment (r = .27, p <.005).

Discriminant validity

Further evidence of the validity of the MBI was obtained by distinguishing it from measures of other psychological constructs that might be presumed to be confounded with burnout. For example, it is possible that the experience of burnout may be nothing more than the experience of dissatisfaction with one's job. Although one would expect the experience of burnout to have some relationship to lowered feelings of job satisfaction, it was predicted that they would not be so highly correlated as to suggest that they were actually the same thing. A comparison of subjects' scores on the MBI and the JDS measure of "general job satisfaction" (n = 91 social service and mental health workers) provides support for this reasoning. Job satisfaction had a moderate negative correlation with both Emotional Exhaustion (r = -.35, p <.001) and Depersonalization (r = -.22, p <.02), as well as a slightly positive correlation with Personal Accomplishment (r = .17, p <.06). However, since less than 13% of the variance is accounted for by any one of these correlations, one can reject the notion that burnout is simply a synonym for job dissatisfaction.

It might also be argued that scores on the MBI are subject to distortion by a social desirability response set, since many of the items describe feelings that are contrary to professional ideals. To test this idea, a sample of 40 graduate students in social welfare was asked to complete both the MBI and the Social Desirability (SD) Scale (Crown & Marlowe, 1964). If reported burnout is not influenced by a social desirability response set, then the scores on the MBI and the SD Scale should be uncorrelated. The results supported this hypothesis, since none of the MBI subscales were significantly correlated with the SD Scale (p >.05). Although some of the correlations were in the direction predicted by considerations of social desirability (positive for Personal Accomplishment, negative for Emotional Exhaustion), their magnitude was too small to achieve statistical significance.

Construct validity

The validity of the MBI is demonstrated further by data that confirm hypotheses about the relationships between experienced burnout and various behavioral responses and feeling states. In all cases, the correlations between MBI scores and these other variables were in line with predictions.

Behavior on the job. Based on previous theorizing and research on this topic (Maslach, 1976), it was hypothesized that burnout would be related to the desire to leave one's job and to have less professional contact with clients. Support for this hypothesis is found in a nation-wide survey of 845 public contact employees in the Social Security Administration (Barad, 1979). Employees scoring high on the subscales of Emotional Exhaustion and Depersonalization, and low on Personal Accomplishment, were most likely to express an interest in leaving their jobs within a year and/or in spending less time with the public. It was also hypothesized that people experiencing burnout would be more likely to get away from their work. Supportive evidence was provided by co-worker ratings of such behaviors ($n = 40$ mental health workers). Staff who took work breaks more frequently scored higher on the frequency dimension for Emotional Exhaustion ($r = .29$, $p < .04$), while workers who were frequently absent from work scored higher on the frequency dimension for Depersonalization ($r = .30$, $p < .04$).

Burnout was also hypothesized to be correlated with various job characteristics. Based on the findings of Maslach and Pines (1977), it was predicted that the greater the number of people one must deal with, the higher the scores on the MBI. Barad (1979) found precisely this pattern of data for Social Security employees; when caseloads were very large (over 40 people served per day), scores were high on Emotional Exhaustion and Depersonalization and low on Personal Accomplishment. It was also predicted that burnout would be associated with a lack of autonomy and independence in carrying out one's work, and indeed, Barad (1979) found that low scores on job autonomy were correlated with high scores on Emotional Exhaustion and Depersonalization. As shown earlier, jobs with low levels of direct feedback from one's work with clients were associated with high burnout scores. Therefore, one would expect that employees who did not feel they knew or understood how effectively they were performing their job would score high on burnout. In support of this hypothesis, low scores on the relevant JDS subscale of "knowledge and results" ($n = 91$) were correlated with high scores on Emotional Exhaustion ($r = -.31$, $p < .001$) and Depersonalization ($r = -.31$, $p < 001$).

Another hypothesized correlate of burnout is an impairment of one's relationships with people in general, and a greater dissatisfaction with them. As applied to the job setting, this hypothesis can be stated as a negative correlation between burnout and one's satisfaction with co-worker relationships. Low scores on the JDS subscale of "social satisfaction" ($n = 180$ nurses, social service and mental health workers) were indeed correlated with high scores on Emotional Exhaustion ($r = -.19$,

$p < .006$) and Depersonalization ($r = -.41$, $p < .001$), and with low scores on Personal Accomplishment ($r = .40$, $p < .001$). Finally, it was predicted that people experiencing burnout would be dissatisfied with opportunities for personal growth and development on the job. This hypothesis received strong support; scores on the JDS "growth satisfaction" subscale ($n = 180$) were negatively correlated with Emotional Exhaustion ($r = -.26$, $p < .001$) and Depersonalization ($r = -.47$, $p < .001$), and positively correlated with Personal Accomplishment ($r = .41$, $p < .001$).

Behavior at home. In line with the above hypotheses, it was predicted that burnout would be related to difficulties in one's relationships with people outside of work, such as family and friends. Data from the police sample ($n = 130$) provide supportive evidence for these predictions. A police officer scoring high on Emotional Exhaustion was more likely to want to be alone, rather than spend time with his family ($r = .19$, $p < .02$). He perceived his children as being more emotionally distant from him if he was experiencing Depersonalization ($r = .31$, $p < .001$), or feelings of low Personal Accomplishment ($r = -.39$, $p < .001$). Similarly, he was more likely to get angry at his wife or children if he was experiencing burnout (Depersonalization, $r = .28$, $p < .001$; Emotional Exhaustion, $r = .26$, $p < .001$). When an officer scored high on the intensity dimension of Depersonalization, his wife felt that he did not share his feelings with her ($r = .19$, $p < .02$) and did not care as much about her ($r = .17$, $p < .03$). She also thought that she did not understand him very well ($r = -.16$, $p < .04$). The officer was more likely to be absent from family celebrations if he scored high on Depersonalization ($r = .21$, $p < .009$). Reports of fewer friends were correlated with frequent feelings of Depersonalization ($r = .22$, $p < .005$). Emotional Exhaustion ($r = .15$, $p < .04$), and low Personal Accomplishment ($r = -.16$, $p < .04$); and, the officer's wife was more likely to say that he and she did not share the same friends (Depersonalization, $r = -.24$, $p < .004$; Emotional Exhaustion, $r = -.18$, $p < .02$).

Previous theorizing and research on burnout suggested some additional hypotheses about stress-related behaviors and coping activities. As predicted, a police officer scoring high on Emotional Exhaustion was rated by his wife as having more frequent problems with insomnia ($r = .24$, $p < .003$). The officers themselves were more likely to report having a drink to cope with stress if they had high scores on Emotional Exhaustion ($r = .24$, $p < .004$) and to report taking tranquilizers when they scored low on Personal Accomplishment ($r = -.21$, $p < .009$). This use of tranquilizers was corroborated by their wives, who were also more likely to report that their husbands used medications if they scored low on Personal Accomplishment ($r = -.33$, $p < .001$) or high on Emotional Exhaustion ($r = .21$, $p < .01$) (pp. 7-15).

The Treatment of Data

Descriptive statistics were used to show the degree of burnout intensity of North Dakota public school classroom teachers. Multiple linear regression was applied to the data using age, sex, marital status, number of dependents, years of teaching experience, level of teaching, the average number of students in the classroom, salary, educational background, and size of the community, using separately the four burnout factors of emotional exhaustion, depersonalization, personal accomplishment, and personal involvement as criteria. This treatment was used to predict the burnout scores of each factor separately for each of the demographic variables. The independent contribution of each predictor was assessed in relation to each criteria. In finding the independent or unique contribution of a variable (or set of variables), a full model including the variable of interest and all other variables is run in relation to a criterion and the multiple correlation coefficient is found and squared (R^2_F). The variables are then rerun but without the variable of interest, generating a second multiple correlation squared (R^2_R). The difference, $R^2_F - R^2_R$, is the accounted variance unique to the variable of interest (Ward and Hook 1962). The unique contribution can be tested by

$$F = \frac{(R^2_F - R^2_R)/k}{(1 - R^2_F)/(N - k - 1)}$$

where k is the number of variables in the dropped set (Williams 1974).

In order to compare means from several demographic variables with the four burnout factors of emotional exhaustion, personal

accomplishment, depersonalization, and personal involvement simultaneously, the analysis of variance was applied (Williams 1974). In order to retain or reject the null hypotheses, the .05 level of significance was considered statistically sufficient.

The analyses were completed using linear models as described in Williams (1974) for both the analysis of variance and the standard use of multiple linear regression. The standard International Business Machines computer programs, as revised at the University of North Dakota and documented by Rosenau, Baska, Edeburn, Lindem, and Steitz (1975), were used. The specific programs as described in Rosenau et al. (1975) were the STWMULT (a multiple linear regression program) and RCREG (a multiple linear regression program allowing for data transformations).

CHAPTER IV

RESULTS AND ANALYSES

This chapter reports the results and analyses of the data collected using the Maslach Burnout Inventory with the sample population of North Dakota public school classroom teachers. The results and analyses are presented in the same order the null hypotheses were stated in chapter 1.

Null hypothesis 1. There are no significant relationships among the burnout factors of emotional exhaustion, depersonalization, personal accomplishment, and personal involvement related to the perceptions of the public school classroom teachers.

In order to test the hypothesis, correlation coefficients were used to determine the relationships among the burnout factors. The correlation matrix of the four burnout factors is shown in table 1. Due to the sample size, any correlation coefficients which have an absolute value larger than .18 are significant at the .01 level; and when the absolute value is equal to or larger than .13, that correlation is significant at the .05 level. However, correlations that achieve statistical significance but remain smaller than .30 will be considered to show only a modest relationship, since $.30^2 = .09$, showing that such correlations only account for 9 percent (or less) of the variability of the other variable. Further, correlations between .30 and .60 will be considered to show a moderate relationship,

TABLE 1

CORRELATIONS AMONG BURNOUT FACTORS

	Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
Burnout Factors	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
Emotional Exhaustion								
Frequency		.76[b]	.51[b]	.44[b]	-.21[b]	-.20[b]	.12	.13[a]
Intensity			.46[b]	.60[b]	-.30[b]	-.15[a]	.09	.24[b]
Depersonalization								
Frequency				.81[b]	-.35[b]	-.34[b]	.06	.05
Intensity					-.37[b]	-.20[b]	.02	.14[a]
Personal Accomplishment								
Frequency						.73[b]	.23[b]	.15[a]
Intensity							.16[a]	.21[b]
Personal Involvement								
Frequency								.77[b]
Intensity								

[a]significant at .05

[b]significant at .01

since $.60^2 = .36$, showing that such correlations only account for 36 percent (or less) of the variability of the other variable.

In table 1, there are four correlations that are titled auto-correlations: emotional exhaustion (frequency and intensity), depersonalization (frequency and intensity), personal accomplishment (frequency and intensity), and personal involvement (frequency and intensity). Emotional exhaustion (frequency) correlates with emotional exhaustion (intensity) with the correlation coefficient of .76. Similarly, the correlation between the frequency and intensity of each of the other burnout factors--depersonalization, personal accomplishment, and personal involvement--are .81, .73, and .77, respectively.

The emotional exhaustion factor significantly correlates with the depersonalization factor. The emotional exhaustion (frequency) shows a significant and moderate relationship with depersonalization in both frequency and intensity with correlation coefficients of .51 and .44, respectively. The emotional exhaustion (intensity) also shows a significant and moderate relationship with depersonalization in both frequency and intensity with correlation coefficients of .46 and .60, respectively.

The personal accomplishment factor shows a significant and modest to moderate negative relationship with the emotional exhaustion factor and the depersonalization factor. Personal accomplishment (frequency) correlates with emotional exhaustion (frequency), emotional exhaustion (intensity), depersonalization (frequency), and depersonalization (intensity) with the correlation coefficients of -.21, -.30, -.35, and -.37, respectively.

The personal involvement factor (frequency) does not significantly correlate with either the emotional exhaustion factor (both frequency and intensity; .12 and .09, respectively) or the depersonalization factor (both frequency and intensity; .06 and .02, respectively). However, the personal involvement factor (frequency) correlates significantly and modestly with the personal accomplishment factor (both frequency and intensity; .23 and .16, respectively).

The personal involvement factor (intensity) has modest significant relationship with the emotional exhaustion factor (both frequency and intensity; .13 and .24, respectively). The personal involvement factor (intensity) does not significantly correlate with the depersonalization factor (frequency) (.05), but it shows modest significant relationship with the depersonalization factor (intensity) (.14). The personal involvement factor (intensity) also correlates significantly and modestly with the personal accomplishment factor (both frequency and intensity; .15 and .21, respectively). The autocorrelation of the personal involvement factor (frequency and intensity) is high and significant (.77).

An examination of the data presented in table 1 clearly indicates that the correlations between frequency and intensity within each factor is high and significant. That suggests that each of the factors is internally consistent.

The most significant relationship between factors is shown to be between the depersonalization factor and the emotional exhaustion factor. There exists a significant and moderate relationship between all four of the measures of intensity and frequency on both factors.

The relationship between factors which seem to be most minimal is between depersonalization and personal involvement. Only one of the four relationships among depersonalization intensity and personal involvement intensity is statistically significant and then only at a modest level.

The personal involvement factor has fewer statistically significant relationships than any other factor, and with the exception of its within relationship between frequency and intensity the statistical relationships which do exist are modest. For these reasons, it could be concluded that this factor is more independent than the other three.

Null hypothesis 2. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of emotional exhaustion related to public school classroom teachers.

In table 2, the significant relationships between the emotional exhaustion factor (frequency) and demographic variables include sex (significant at the .05 level), highest degree (significant at the .05 level), level of teaching (significant at the .01 level), and salary (significant at the .05 level). In terms of unique contributions, the variables highest degree, level of teaching, and number of years of teaching experience show significant relationships with the emotional exhaustion factor (frequency) at the .05 level, the .01 level, and the .05 level, respectively. These appear to be the most important variables related to the emotional exhaustion factor (frequency).

TABLE 2

THE RELATIONSHIP OF VARIABLES TO THE EMOTIONAL EXHAUSTION FACTOR (FREQUENCY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.17840	.00032	< 1	.00065	< 1
Sex	.13015	.01694	4.22[a]	.00316	< 1
Marital Status	.07497	.00562	< 1	.00553	< 1
Number of Dependents	.08623	.00744	< 1	.00328	< 1
Highest Degree	.19805	.03922	3.31[a]	.02936	2.71[a]
Level of Teaching	.27812	.07735	5.07[b]	.06359	5.87[b]
Number of Years Teaching	.18835	.03548	2.23	.04083	2.83[a]
Average Number of Students	.06924	.00479	< 1	.00047	< 1
Salary	.18294	.03347	2.80[a]	.02012	1.86
Size of Community	.19175	.03677	1.53	.02157	< 1

[a] significant at .05

[b] significant at .01

As shown in table 3, highest degree, level of teaching, number of years of teaching experience, and size of the community have significant independent relationships to the emotional exhaustion factor (intensity). They are significant at the .01, .01, .05, and .05 levels, respectively. In terms of unique contributions, the variables highest degree, level of teaching, and number of years of teaching experience show significant relationships with the emotional factor (intensity) at the .05, .01, and .01 levels, respectively.

Null hypothesis 3. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of depersonalization related to public school classroom teachers.

Table 4 reports significant relationships between demographic variables and the depersonalization factor (frequency). Sex and the level of teaching are both significant at the .01 level. In terms of unique contributions, sex, marital status, and level of teaching are significantly related to the depersonalization factor (frequency) at the .01 level, the .05 level, and the .05 level, respectively.

The significant relationship between the demographic variables and depersonalization (intensity) are found in table 5. It shows that sex and level of teaching were significantly related to the depersonalization factor (intensity). Both are significant at the .01 level. In terms of unique contribution, sex, marital status, and level of teaching are significantly related to the depersonalization (intensity) factor. They are significant at the .01, .01, and .05 levels, respectively.

TABLE 3

THE RELATIONSHIP OF VARIABLES TO THE EMOTIONAL EXHAUSTION FACTOR (INTENSITY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.13724	.01883	2.34	.01314	1.96
Sex	.03859	.00149	< 1	.00155	< 1
Marital Status	.09934	.00987	< 1	.00778	< 1
Number of Dependents	.10262	.01053	< 1	.00086	< 1
Highest Degree	.22793	.05195	4.44[b]	.03376	3.36[a]
Level of Teaching	.29479	.08690	5.76[b]	.07877	5.88[b]
Number of Years Teaching	.20622	.04253	2.69[a]	.05159	3.85[b]
Average Number of Students	.10618	.01127	< 1	.00131	< 1
Salary	.16955	.02875	2.40	.01674	1.50
Size of Community	.23334	.54450	2.30[a]	.04169	2.07

[a]significant at .05

[b]significant at .01

TABLE 4

THE RELATIONSHIP OF VARIABLES TO THE DEPERSONALIZATION FACTOR (FREQUENCY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.05561	.00309	< 1	.01467	2.06
Sex	.30289	.09174	24.75[b]	.04718	13.25[b]
Marital Status	.09044	.00818	< 1	.03292	3.08[a]
Number of Dependents	.08381	.00702	< 1	.02000	1.87
Highest Degree	.12927	.01671	1.38	.01249	< 1
Level of Teaching	.27499	.07562	4.95[b]	.03426	2.41[a]
Number of Years Teaching	.15035	.02260	1.40	.01393	< 1
Average Number of Students	.09370	.00878	< 1	.00102	< 1
Salary	.11299	.01277	1.05	.00575	< 1
Size of Community	.16274	.02648	1.09	.00855	< 1

[a]significant at .05

[b]significant at .01

TABLE 5

THE RELATIONSHIP OF VARIABLES TO THE DEPERSONALIZATION FACTOR (INTENSITY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.14499	.02102	2.69	.00450	< 1
Sex	.27102	.07345	19.42[b]	.02222	6.40[b]
Marital Status	.08530	.00728	< 1	.04205	4.04[b]
Number of Dependents	.13413	.01729	1.48	.02692	2.59
Highest Degree	.14413	.02077	1.72	.02291	2.20
Level of Teaching	.28808	.08295	5.47[b]	.04004	2.88[a]
Number of Years Teaching	.17370	.03017	1.88	.01406	1.01
Average Number of Students	.10174	.01035	< 1	.00248	< 1
Salary	.14379	.02067	1.71	.00924	< 1
Size of Community	.18468	.03410	1.42	.01869	< 1

[a]significant at .05

[b]significant at .01

Null hypothesis 4. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of personal accomplishment related to public school classroom teachers.

Table 6 shows that sex, number of dependents, level of teaching, and size of community are significant when considering the personal accomplishment factor (frequency). They are significant at the .01, the .05, the .01, and the .05 levels, respectively. In terms of unique contribution, sex is the only variable which has the significant relationship with the personal accomplishment factor (frequency). It is significant at the .01 level.

The sex of the teacher and the number of dependents are significant at the .01 and the .05 levels, respectively, in regard to the personal accomplishment factor (intensity) as presented in table 7. In terms of unique contributions, marital status and the number of dependents are also significant for the personal accomplishment factor (intensity) at the .05 level.

Null hypothesis 5. There are no significant relationships among age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of community with the burnout factor of personal involvement related to public school classroom teachers.

In testing for significant relationships between the demographic variables and the personal involvement factor (frequency), table 8 shows that sex and size of community are both significant at the .05

TABLE 6

THE RELATIONSHIP OF VARIABLES TO THE PERSONAL ACCOMPLISHMENT FACTOR (FREQUENCY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.07678	.00589	< 1	.00975	1.22
Sex	.21761	.04735	12.18[b]	.02076	5.78[b]
Marital Status	.09027	.00815	< 1	.01884	1.75
Number of Dependents	.18246	.03329	2.79[a]	.02030	1.88
Highest Degree	.07849	.00616	< 1	.00356	< 1
Level of Teaching	.26146	.68360	4.44[b]	.02080	1.45
Number of Years Teaching	.16087	.02588	1.61	.02968	2.07
Average Number of Students	.14856	.02207	1.83	.00880	< 1
Salary	.13634	.01859	1.53	.00584	< 1
Size of Community	.25445	.06474	2.77[a]	.02749	1.28

Note: R for Full Model .48032

R^2 for Full Model .23071

[a]significant at .05

[b]significant at .01

TABLE 7

THE RELATIONSHIP OF VARIABLES TO THE PERSONAL ACCOMPLISHMENT FACTOR (INTENSITY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.04019	.00161	< 1	.00132	< 1
Sex	.15560	.02421	6.08[b]	.01989	2.62
Marital Status	.13528	.18300	1.51	.03150	2.77[a]
Number of Dependents	.20487	.04197	3.55[a]	.03753	3.30[a]
Highest Degree	.13474	.01815	1.50	.01423	1.25
Level of Teaching	.14832	.02200	1.36	.00893	< 1
Number of Years Teaching	.15161	.02300	1.42	.02476	1.63
Average Number of Students	.11594	.01344	1.10	.00539	< 1
Salary	.08840	.00781	< 1	.00499	< 1
Size of Community	.20967	.04396	1.84	.02090	< 1

[a]significant at .05

[b]significant at .01

TABLE 8

THE RELATIONSHIP OF VARIABLES TO THE PERSONAL INVOLVEMENT FACTOR (FREQUENCY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.05194	.00270	< 1	.00210	< 1
Sex	.13490	.01820	4.54[a]	.01243	1.51
Marital Status	.11527	.01329	1.09	.01272	1.03
Number of Dependents	.07032	.00494	< 1	.01132	< 1
Highest Degree	.04735	.00224	< 1	.00356	< 1
Level of Teaching	.13077	.01710	1.05	.00623	< 1
Number of Years Teaching	.08704	.00754	< 1	.00543	< 1
Average Number of Students	.07979	.00637	< 1	.00292	< 1
Salary	.13856	.01920	1.59	.01105	< 1
Size of Community	.23314	.05435	2.30[a]	.03592	1.46

Note: R for Full Model .35139

R^2 for Full Model .12347

[a]significant at .05

level. None of the variables are significant in terms of unique contribution.

According to data presented in table 9, there are no significant relationships between demographic variables and the personal involvement factor (intensity). In terms of unique contribution, there is also no variable which contributes to the relationship with the personal involvement factor (intensity). It is obvious that the personal involvement factor (intensity) is an independent factor in regard to burnout.

The following analysis of demographic variables is presented and discussed regarding the four burnout factors: emotional exhaustion, depersonalization, personal accomplishment, and personal involvement. This analysis is intended to amplify the data presented in tables one through nine which dealt with the relationships between the demographic variables and the four burnout factors. The amplification of the data measures burnout by examining the means and the F-values for each of the demographic variables.

In table 10, the comparisons of mean scores of the emotional exhaustion factor (frequency) between males and females are reported. The mean score for males on the emotional exhaustion factor (frequency) is 20.83, whereas the females' mean score is 18.24. This difference is significant at the .05 level. In terms of the emotional exhaustion factor (intensity), there are no significant differences between the males' mean score (27.03) and the females' mean score (26.05). This suggests that the intensity of emotional exhaustion was not experienced in a significantly different way by males and females.

Table 10 shows the comparisons between males' and females' mean scores on the depersonalization factor (frequency). The mean

TABLE 9

THE RELATIONSHIP OF VARIABLES TO THE PERSONAL INVOLVEMENT FACTOR (INTENSITY); N = 246

Set	R for Set	R^2 for Set	F	Unique Contribution	F
Age	.04266	.00182	< 1	.00212	< 1
Sex	.07154	.00512	1.26	.02012	2.48
Marital Status	.06419	.00412	< 1	.01169	< 1
Number of Dependents	.02874	.00083	< 1	.01592	1.31
Highest Degree	.08597	.00739	< 1	.00648	< 1
Level of Teaching	.12209	.01491	< 1	.02604	1.61
Number of Years Teaching	.12519	.01567	< 1	.01888	1.17
Average Number of Students	.09692	.00939	< 1	.01044	< 1
Salary	.10744	.01154	< 1	.01077	< 1
Size of Community	.18430	.03397	1.41	.03638	1.50

Note: R for Full Model .36393

R^2 for Full Model .13244

TABLE 10

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR MALES AND FEMALES

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Sex	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
95	Male	20.83	27.03	8.58	11.42	33.72	38.85	7.28	9.72
151	Female	18.24	26.05	5.47	7.68	36.99	41.23	8.25	10.31
F-Values		4.22[a]	< 1	24.75[b]	19.42[b]	12.18[b]	6.08[a]	4.54[a]	1.26

[a]significant at .05

[b]significant at .01

score for males on the depersonalization factor (frequency) is 8.58, whereas the females' mean score is 5.47. This difference is significant at the .01 level. This suggests that males experience depersonalization more often than females. The mean score for males on the depersonalization factor (frequency) is 11.42, whereas the females' mean score is 7.68. This difference is significant at the .01 level. This suggests that males experience a higher degree of intensity in depersonalization than females.

Table 10 also shows the comparisons of mean scores between males and females in regard to the personal accomplishment factor (frequency and intensity). The female teachers have a higher mean score (36.99) than the male teachers' mean score (33.72) on the personal accomplishment factor (frequency). This difference is significant at the .01 level. This proposes that female teachers may experience personal accomplishment somewhat more often than male teachers. Table 10 also shows that female teachers have a higher mean score (41.33) than the male teachers' mean score (38.85) on the personal accomplishment factor (intensity). This difference is significant at the .05 level. This indicates that female teachers may experience somewhat higher feelings of personal accomplishment than male teachers.

The data presented in table 10 report the comparisons between male and female teachers' mean scores of the personal involvement factor (frequency). The mean score for males is 7.28, whereas the females' mean score is 8.25. This difference is significant at the .05 level. This suggests that females may have experienced more personal involvement than males. In terms of the personal involvement

factor (intensity), there are no significant differences between the males' mean score (9.72) and the females' mean score (10.31). This suggests that the intensity of personal involvement was not experienced in a significantly different way by males and females.

Table 11 presents the comparisons of mean scores of the variable highest degree for different groups of teachers with regard to the frequency of emotional exhaustion. The differences among mean scores for teachers who had completed bachelor's degrees (19.30), master's degrees (19.38), specialist's degrees (19.15), and other degrees (19.18) are significant at the .05 level. This suggests that teachers who have master's degrees and bachelor's degrees may have experienced emotional exhaustion somewhat more often than those teachers with specialist's and other degrees.

The comparisons among the mean scores of teachers who held different degrees with regard to the emotional exhaustion factor (intensity) are also reported in table 11. The differences among mean scores for teachers who had completed bachelor's degrees (26.92), master's degrees (27.14), specialist's degrees (12.39), and other degrees (18.66) are significant. This suggests that the intensity of emotional exhaustion was experienced in a significantly different way by groups of teachers who held different degrees.

Table 11 presents the comparisons of mean scores of the variable highest degree for different groups of teachers with regard to the frequency of depersonalization. The mean scores of teachers who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 6.72, 7.12, 4.20, and 2.00, respectively. It appears that there are some differences among the mean scores of different groups of teachers, but the differences are not significant.

TABLE 11

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR THE HIGHEST DEGREE HELD

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Highest Degree	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
205	Bachelor	19.30	26.92	6.72	9.25	35.96	40.57	7.91	10.05
33	Master	19.38	27.14	7.12	9.58	34.49	38.97	7.72	10.48
5	Specialist	19.15	12.39	4.20	4.26	36.40	42.80	7.00	8.00
3	Other	19.18	18.66	2.00	3.34	33.34	33.34	8.66	11.00
F-Values		3.31[a]	4.44[b]	1.38	1.72	< 1	1.50	< 1	< 1

[a]significant at .05

[b]significant at .01

The mean scores of the variable highest degree for different groups of teachers with regard to the intensity of depersonalization are also reported. The mean scores of those who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 9.25, 9.58, 4.26, and 3.34, respectively. The mean scores of teachers who have bachelor's degrees and master's degrees are higher than the mean scores of those who have specialist's degrees and other degrees, but they do not differ significantly. This shows that teachers with different degrees have experienced depersonalization with similar frequency and intensity.

The comparisons of mean scores of different degrees held by teachers with regard to the personal accomplishment factor (frequency) are reported. The mean scores of teachers who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 35.96, 34.49, 36.40, and 33.34, respectively. No significant differences exist among those mean scores. The comparisons of mean scores of different degrees held by teachers with regard to the personal accomplishment factor (intensity) are also reported. The mean scores of teachers who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 40.57, 38.97, 42.80, and 33.34, respectively. There are some differences among the mean scores, but they are not significantly different. It shows that teachers with different degrees held may have experienced personal accomplishment in such a way that differences cannot be distinguished for either frequency or intensity.

Table 11 presents the comparisons of mean scores of the variable highest degree for different groups of teachers with regard to the frequency of the personal involvement factor. The mean scores

of teachers who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 7.91, 7.72, 7.00, and 8.66, respectively. The comparisons of mean scores of the variable highest degree for different groups of teachers with regard to the personal involvement factor (intensity) are also reported. The mean scores of teachers who have bachelor's degrees, master's degrees, specialist's degrees, and other degrees are 10.05, 10.48, 8.00, and 11.00, respectively. According to table 11, there are differences among the mean scores on both frequency and intensity; but these are not significant differences. Teachers who hold different degrees have apparently experienced personal involvement with students almost to the same extent.

Table 12 reports the comparisons of mean scores of teachers in different grade levels with regard to the emotional exhaustion factor (frequency). Those teachers who did not designate themselves as primary teachers (K-3), intermediate teachers (4-6), junior high school teachers (7-9), and senior high school teachers (10-12) are noted as "other." Teachers who teach in grades four through six have the lowest mean score (19.79) in the emotional exhaustion factor (frequency). Those teachers designated as "other" have the highest mean score (20.45) in the emotional exhaustion factor (frequency). The comparisons of mean scores between teachers who have been assigned to teach grades kindergarten through three and those who have been assigned to teach grades ten through twelve are 20.06 and 20.05, respectively. The differences among mean scores of all groups of teachers, including the group designated as "other," are significant at the .01 level. This suggests that teachers designated as "other" may have experienced emotional exhaustion more frequently than others.

TABLE 12

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR LEVEL OF TEACHING

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Level of Teaching	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
27	K-3	20.06	26.97	5.19	6.81	38.69	42.50	8.78	10.61
33	4-6	19.79	17.88	4.18	5.52	38.90	41.27	7.91	8.91
50	7-9	20.16	27.98	6.60	8.86	36.65	40.99	7.99	10.41
51	10-12	20.05	25.19	6.75	9.26	34.72	40.35	7.69	10.35
85	Other	20.45	29.00	7.76	10.53	34.41	39.40	7.84	10.08
F-Values		5.07[a]	5.76[a]	4.95[a]	5.47[a]	4.44[a]	1.36	1.05	< 1

[a]significant at .01

In terms of the intensity of emotional exhaustion, the table shows that teachers designated as "other" have the highest mean score (29.00). Teachers who teach in grades four through six have the lowest mean score (17.88). The comparisons of mean scores among teachers who teach in grades kindergarten through three, seven through nine, and ten through twelve are 26.97, 27.98, and 25.19, respectively. The differences among mean scores of all groups of teachers, including the group designated as "other," are significant at the .01 level. This suggests that teachers designated as "other" may have experienced the emotional exhaustion factor more frequently and intensely than others.

Table 12 shows that teachers designated as "other" have the highest mean score in the depersonalization factor (frequency) (7.76). Teachers who have been assigned to teach grades four through six have the lowest mean score (4.18) in the depersonalization factor (frequency). Teachers who teach grades ten through twelve and seven through nine tend to be quite similar in their frequency of depersonalization. Their mean scores are 6.75 and 6.60, respectively. The differences among mean scores for all groups of teachers, including the group designated as "other," are significantly different at the .01 level. This suggests that teachers designated as "other" may have experienced a feeling of depersonalization more frequently than others.

In terms of the intensity of depersonalization, teachers designated as "other" have the highest degree of intensity in depersonalization (10.53). Teachers who teach in grades ten through twelve and seven through nine have low mean scores in the depersonalization factor (intensity) (9.26 and 8.86, respectively); whereas teachers

who teach in grades four through six have the lowest degree of intensity in depersonalization (5.52). The differences among mean scores for all groups of teachers, including the group designated as "other," are significantly different at the .01 level. This suggests that teachers designated as "other" may have experienced depersonalization more intensely than others.

Data presented in table 12 show the comparisons of mean scores among teachers who teach in grades kindergarten through three, four through six, seven through nine, ten through twelve, and those designated as "other" with regard to the personal accomplishment factor (frequency). The mean scores for these groups are 38.69, 38.90, 36.65, 34.72, and 34.41, respectively. The differences among mean scores for all groups of teachers, including the group designated as "other," are significantly different at the .01 level. This suggests that teachers designated as "other" may have experienced personal accomplishment less frequently than others.

The comparisons of mean scores among all groups of teachers who teach in different grade levels are also reported with regard to the personal accomplishment factor (intensity) in table 12. The mean scores for teachers who teach in grades kindergarten through three, four through six, seven through nine, ten through twelve, and those designated as "other" are 42.50, 41.27, 40.99, 40.35, and 39.40, respectively. The differences among mean scores of all groups of teachers, including the group designated as "other," are not significant. This suggests that the intensity of personal accomplishment was not experienced in a significantly different way by any of the groups of teachers.

Data presented in table 12 also show the comparisons of mean scores for groups of teachers with regard to the frequency of personal involvement. Teachers who teach in grades kindergarten through three, four through six, seven through nine, ten through twelve, and those designated as "other" have mean scores of 8.78, 7.91, 7.99, 7.69, and 7.84, respectively. The differences among mean scores of all groups of teachers, including the group designated as "other," are not significant. This suggests that the frequency of personal involvement was not experienced in a significantly different way by any of the groups of teachers.

Table 12 also reports the comparisons of mean scores of teachers in different grade levels with regard to the intensity of personal accomplishment. The mean scores of teachers who teach in grades kindergarten through three, four through six, seven through nine, ten through twelve, and those designated as "other" are 10.61, 8.91, 10.35, and 10.08, respectively. The differences among mean scores of all groups of teachers, including the group designated as "other," are not significant. This suggests that the intensity of personal involvement was not experienced in a significantly different way by any of the groups of teachers.

The comparisons of mean scores for the teachers' salary ranges are reported in table 13. Teachers who have salaries of more than $19,000 are the persons who have the highest frequency of emotional exhaustion based on their mean score of 21.59. On the contrary, teachers with a salary in the range of $7,000 to $11,000 have the least frequency of emotional exhaustion; the mean score is 15.74. Those who have salaries of $11,001 to $15,000 and $15,001 to $19,000 have mean scores of 19.75 and 18.77, respectively. The differences

TABLE 13

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR THE SALARY PER YEAR

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Salary	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
34	$7,000-$11,000	15.74	22.11	6.06	8.03	36.17	39.94	7.43	9.23
119	$11,001-$15,000	19.75	27.88	6.88	9.68	35.28	40.14	8.38	10.41
66	$15,001-$19,000	18.77	25.27	6.08	8.02	37.09	41.29	7.38	9.80
27	More than $19,000	21.59	28.48	7.84	10.74	33.89	39.15	7.48	10.41
F-Values		2.80[a]	2.40[a]	1.05	1.71	1.53	< 1	1.59	< 1

[a]significant at .05

among the mean scores for teachers in all salary ranges are significant at the .05 level. This suggests that teachers who are in different ranges of salary may have experienced emotional exhaustion with some frequency.

Table 13 also reports the comparisons of mean scores for teacher salary ranges with regard to the emotional exhaustion factor (intensity). Teachers who have salaries of more than $19,000 have a mean score of 28.48, which is similar to the mean score of those who have salaries between $11,001 to $15,000 (27.88). Teachers who have salaries between $7,000 to $11,000 and $15,001 to $19,000 have mean scores of 15.74 and 18.77, respectively. The differences among the mean scores for teachers in all salary ranges are significant at the .05 level. This suggests that teachers who are in different ranges of salary may have experienced emotional exhaustion with some degree of intensity.

The comparisons of mean scores of teachers' salary ranges are also reported in table 13 with regard to the depersonalization factor (frequency). The table shows that teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 6.06, 6.88, 6.08, and 7.84, respectively. There seem to be some differences among the mean scores but they are not statistically significant. In terms of the intensity of depersonalization, table 13 shows that teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 8.03, 9.68, 8.02, and 10.74, respectively. There are no statistically significant differences among the mean scores. It appears that those teachers have experienced almost the

same amount of depersonalization.

Table 13 shows the comparisons of mean scores of teachers' salary ranges with regard to the personal accomplishment factor (frequency). Teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 36.17, 35.28, 37.09, and 33.89, respectively. The mean scores are slightly different from each other, but they are not statistically significant.

In terms of the intensity of personal accomplishment, table 13 shows that teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 39.94, 40.14, 41.29, and 39.15, respectively; and statistically there are no significant differences among them. This suggests that teachers with different salary ranges may have experienced similar feelings of intensity and frequency with regard to the personal accomplishment factor.

Mean scores of teachers' salary ranges are also reported in table 13 with regard to the personal involvement factor (frequency). Teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 7.43, 8.38, 7.38, and 7.48, respectively; and statistically there are no significant differences among them. The comparisons of mean scores of teachers' salary ranges with regard to the personal involvement factor (intensity) are also shown in table 13. Teachers who have salaries between $7,000 to $11,000; $11,001 to $15,000; $15,001 to $19,000; and those who have salaries more than $19,000 have mean scores of 9.23, 10.41, 9.80, and 10.41, respectively. The differences among the mean scores for teachers in

all salary ranges are not significantly different for the personal involvement factor (intensity). This suggests that teachers in all salary ranges may have experienced similar amounts of frequency and intensity regarding the personal involvement factor.

Table 14 shows the comparisons of mean scores of teachers categorized by number of years of teaching experience with regard to the frequency and the intensity of the emotional exhaustion factor. In terms of the frequency of the emotional exhaustion factor, the data reveal that teachers who have four to six years of teaching experience have the highest mean score of emotional exhaustion (frequency) which is 20.02. Teachers who have seven to nine years of teaching experience have a mean score slightly different from those who have more than twelve years of teaching experience (19.61 and 19.32, respectively). Teachers who have ten to twelve years of teaching experience have a higher mean score than those who have one to three years of teaching experience (18.21 and 16.51, respectively). The data show that mean scores are somewhat different, but they are not statistically significant. This suggests that teachers who are categorized by the number of years of teaching experience may have experienced a similar amount of frequency regarding the emotional exhaustion factor.

The comparisons of mean scores of teachers categorized by number of years of teaching experience with regard to the intensity of emotional exhaustion are also shown in table 14. The highest degree of intensity in emotional exhaustion occurs with teachers who have four to six years of teaching experience (29.93). Teachers who have ten to twelve years of teaching experience have the lowest mean score on the degree of intensity in emotional exhaustion (22.92). Teachers

TABLE 14

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR NUMBER OF YEARS TEACHING

N	Number of Years Teaching	Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
		Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
14	1-3	16.51	24.43	6.31	9.00	36.43	41.84	7.69	9.49
40	4-6	20.02	29.93	6.99	10.85	34.50	39.53	7.72	10.63
68	7-9	19.61	27.47	6.72	9.85	35.08	40.25	7.93	9.77
24	10-12	18.21	22.92	7.14	8.96	37.88	42.09	7.16	9.08
100	More than 12	19.32	25.48	5.95	7.98	36.06	40.02	8.10	10.40
F-Values		2.23	2.69[a]	1.40	1.88	1.61	1.42	< 1	< 1

[a] significant at .05

who have teaching experience from one to three years, seven to nine years, and more than twelve years have mean scores of 24.43, 27.47, and 25.48, respectively. The differences of mean scores of teachers who are categorized by the number of years of teaching experience are shown to be significantly different at the .05 level with regard to intensity on the emotional exhaustion factor. This suggests that the number of years a teacher has taught may have contributed to the amount of intensity felt on the emotional exhaustion factor.

Table 14 also shows the comparisons of mean scores of teachers categorized by number of years of teaching experience with regard to the depersonalization factor (frequency). The mean scores of teachers who have one to three, four to six, seven to nine, ten to twelve, and more than twelve years of teaching experience are 6.31, 6.99, 6.72, 7.14, and 5.95, respectively. The data show that there are no statistically significant differences among them. The comparisons of mean scores of teachers categorized by number of years of teaching experience with regard to the intensity of depersonalization are also reported. The mean scores of teachers who have one to three, four to six, seven to nine, ten to twelve, and more than twelve years of teaching experience are 9.00, 10.85, 9.85, 8.96, and 7.98, respectively. There are no statistically significant differences among them. This suggests that the number of years a teacher has taught may not have contributed to the amount of intensity felt regarding the depersonalization factor.

It is reported in table 14 that there are no statistically significant differences among mean scores of teachers from different categories of number of years of teaching experience in both frequency and intensity of the personal accomplishment factor. Teachers who

have one to three, four to six, seven to nine, ten to twelve, and more than twelve years of teaching experience have mean scores of 36.43, 34.50, 35.08, 37.88, and 36.06, respectively. In terms of the intensity of personal accomplishment, table 14 reveals that teachers who have one to three, four to six, seven to nine, ten to twelve, and more than twelve years of teaching experience have mean scores of 41.84, 39.53, 40.25, 42.09, and 40.02, respectively. This suggests that the number of years a teacher has taught may not have contributed to the amount of intensity and the frequency experienced regarding the personal accomplishment factor.

Table 14 also shows the comparisons of mean scores of teachers categorized by number of years of teaching experience with regard to frequency and intensity of the personal involvement factor. In terms of the frequency of the personal involvement factor, the data show that teachers who have one to three, four to six, seven to nine, ten to twelve, and more than twelve years of teaching experience have mean scores of 7.69, 7.72, 7.93, 7.16, and 8.10, respectively. Although data in table 14 do not show the statistically significant differences among mean scores of teachers categorized by number of years of teaching experience, the data reveal that teachers who have four to six and more than twelve years of teaching experience have higher mean scores than those who have one to three, seven to nine, and ten to twelve years of teaching experience. Their mean scores are 10.63, 10.40, 9.49, 9.77, and 9.08, respectively. These suggest that the number of years a teacher has taught may not have contributed to the amount of frequency and intensity felt by teachers on the personal involvement factor.

Table 15 shows the comparisons of mean scores for categories regarding the size of communities where teachers teach with regard to the frequency and intensity of the four burnout factors. In terms of the frequency of the emotional exhaustion factor, the data show that there are no statistically significant differences among its mean scores based on size of community. Teachers who teach in the community with a population between 20,001 to 40,000 have the lowest mean score (15.76) under frequency on the emotional exhaustion factor. On the other hand, teachers who teach in communities with a population of 2,501 to 5,000 and those who teach in communities with a population under 500 seem to have higher mean scores in the frequency of the emotional exhaustion factor than those who teach in the communities with the population of 501 to 2,500; 5,001 to 10,000; 10,001 to 20,000; and over 40,000. Their mean scores are 22.45, 21.33, 18.91, 17.80, 19.90, and 19.02, respectively. This suggests that the size of the community where a teacher lives may not have contributed to the amount of frequency felt by teachers regarding emotional exhaustion.

As shown in table 15, there exists a statistically significant difference among mean scores of teachers who teach in different sizes of communities regarding intensity on the emotional exhaustion factor (significant at the .05 level). The data show that teachers who teach in the community with a population of 501 to 2,500 have the highest mean score of intensity in emotional exhaustion (34.30). Teachers who teach in communities with a population of 2,501 to 5,000; under 500; and 10,001 to 20,000 have higher mean scores than those who teach in communities with a population over 40,000; 20,001 to 40,000; and 5,001 to 10,000. Their mean scores are 30.25, 29.80,

TABLE 15

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR THE SIZE OF COMMUNITY

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Size of Community	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
44	Under 500	21.33	29.80	7.84	10.44	33.00	37.64	8.51	10.76
79	501-2,500	18.01	34.30	6.49	8.54	36.79	40.68	8.25	10.00
24	2,501-5,000	22.45	30.25	7.87	10.79	36.58	40.37	8.83	11.34
10	5,001-10,000	17.80	21.80	5.80	7.60	36.90	41.80	8.40	10.10
30	10,001-20,000	19.90	29.33	6.33	10.10	32.87	39.10	6.37	9.10
21	20,001-40,000	15.76	22.29	5.38	6.42	37.33	42.04	6.57	8.58
38	Over 40,000	19.02	22.61	6.02	8.78	37.34	42.26	7.53	10.27
F-Values		1.53	2.30[a]	1.09	1.41	2.77[a]	1.84	2.30[a]	1.41

[a]significant at .05

29.33, 22.61, 22.29, and 21.80, respectively. This suggests that the size of the community where a teacher lives may have contributed to the degree of intensity felt by teachers regarding emotional exhaustion.

It is also shown in table 15 that there are no statistically significant differences among mean scores of teachers who teach in different sizes of communities for both frequency and intensity on the depersonalization factor. The data show that teachers who teach in communities with the population less than 500; 501 to 2,500; 2,501 to 5,000; 5,001 to 10,000; 10,001 to 20,000; 20,001 to 40,000; and more than 40,000 when considering frequency have mean scores of 7.84, 6.49, 7.87, 5.80, 6.33, 5.38, and 6.02, respectively. The data also show the comparisons of mean scores of categories of teachers who teach in different sizes of communities regarding the intensity of depersonalization. Teachers who teach in the communities with the population of 2,501 to 5,000; less than 500; and 10,001 to 20,000 have slightly higher mean scores than those who teach in the communities with population over 40,000; 501 to 2,500; 5,001 to 10,000; and 20,001 to 40,000. Their mean scores are 10.79, 10.44, 10.10, 8.78, 8.54, 7.60, and 6.42, respectively. This suggests that size of community where a teacher lives may not have contributed to the amount of frequency felt by teachers regarding personal accomplishment.

In terms of the personal accomplishment factor, table 15 shows that there are some statistically significant differences among mean scores regarding the frequency on the personal accomplishment factor (significant at the .05 level). It seems clear that teachers who teach in the communities with population of 10,001 to 20,000 and those who teach in communities with a population less than 500 may

have experienced less frequent personal accomplishment than do those who teach in communities with population over 40,000; 20,001 to 40,000; 5,001 to 10,000; 501 to 2,500; 2,501 to 5,000. Their mean scores presented in the order of reference are 32.87, 33.00, 37.34, 37.33, 36.90, 36.79, and 36.58. Table 15 also shows that there are no statistically significant differences among mean scores of teachers who teach in different sizes of communities regarding intensity on the personal accomplishment factor. The data show that teachers who teach in communities with population less than 500; 501 to 2,500; 2,501 to 5,000; 5,001 to 10,000; 10,001 to 20,000; 20,001 to 40,000; and more than 40,000 have mean scores of 37.64, 40.68, 40.37, 41.80, 39.10, 42.04, and 42.26, respectively. This suggests that size of community where a teacher lives may not have contributed to the amount of frequency felt by teachers regarding personal accomplishment.

As shown in table 15, there are statistically significant differences among mean scores of teachers who teach in different sizes of communities regarding frequency on the personal involvement factor (significant at the .05 level). Teachers who teach in communities with population of 2,501 to 5,000 have the highest mean score in frequency on the personal involvement factor (8.83). Teachers who teach in communities with population of 10,001 to 20,000 have the lowest mean score on the frequency of the personal involvement factor (6.37). It is clear that teachers who teach in communities of 10,001 or less may have experienced more frequent personal involvement than did those who taught in communities with population of more than 10,000. In terms of intensity on the personal involvement factor, table 15 shows that there are no

statistically significant differences among the mean scores. The data show that teachers who teach in communities with population of less than 500; 501 to 2,500; 2,501 to 5,000; 5,001 to 10,000; 10,001 to 20,000; 20,001 to 40,000; and more than 40,000 have mean scores of 10.76, 10.00, 11.34, 10.10, 9.10, 8.58, and 10.27, respectively. This suggests that size of community where a teacher lives may not have contributed to the degree of intensity felt by teachers regarding personal involvement.

Table 16 shows the comparisons of mean scores of teachers categorized by marital status with regard to the four burnout factors. The data indicate that there are no statistically significant differences among mean scores regarding frequency or intensity on the emotional exhaustion factor. This suggests that marital status may not have contributed to the amount of frequency and intensity felt by teachers regarding emotional exhaustion. However, the data also reveal that single teachers have the highest mean scores in both frequency and intensity on the emotional exhaustion factor (20.50 and 28.70, respectively). Married teachers and divorced teachers seem to experience almost the same amount of emotional exhaustion for both frequency and intensity (18.94 and 25.78, 18.75 and 25.19, respectively). Widowed teachers have the lowest mean score on the frequency of emotional exhaustion (17.70); whereas their mean scores on intensity are somewhat higher than the mean scores of married teachers and divorced teachers (25.78 and 25.19, respectively).

The data about marital status show that no significant differences exist on the depersonalization factor in either frequency or intensity. This shows that marital status may not have contributed to the amount of frequency and intensity felt by teachers

TABLE 16

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR MARITAL STATUS

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Marital Status	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
55	Single	20.50	28.70	7.07	9.70	36.02	40.93	8.37	10.34
169	Married	18.94	25.78	6.38	8.78	35.91	40.49	7.76	10.10
10	Widowed	17.70	26.40	7.99	11.20	34.20	36.00	8.50	9.31
12	Divorced	18.75	25.19	7.58	9.34	33.25	38.50	6.59	9.34
F-Values		< 1	< 1	< 1	< 1	< 1	1.51	1.09	< 1

regarding depersonalization. Table 16 provides data comparing the mean scores of the different categories of marital status. It shows that the widowed teachers have the highest mean scores in depersonalization for both frequency and intensity (7.99 and 11.20, respectively). Married teachers appear to have the lowest mean scores in depersonalization for both frequency and intensity (6.38 and 8.78, respectively). The mean scores in depersonalization for both frequency and intensity of single teachers and divorced teachers are 7.07 and 9.70, 7.58 and 9.34, respectively.

Table 16 also shows the comparisons of mean scores of teachers categorized by marital status with regard to the personal accomplishment for both frequency and intensity. The data show that single teachers and married teachers have the highest mean scores for both frequency and intensity of the personal accomplishment factor (36.02 and 40.93, 35.91 and 40.49, respectively). Widowed teachers and divorced teachers tend to experience only a slight difference in frequency of personal accomplishment (34.20 and 33.25, respectively). On the other hand, divorced teachers seem to experience more intensity in personal accomplishment than widowed teachers (38.50 and 36.00, respectively). However, data presented in table 16 show that there are no significant differences among mean scores of teachers categorized by marital status. This suggests that marital status may not have contributed to the amount of frequency and intensity felt by teachers regarding personal accomplishment.

According to table 16, widowed teachers seem to experience more frequent personal involvement than do single teachers, married teachers, or divorced teachers. Their mean scores are 8.50, 8.37, 7.76, and 6.59, respectively. The data also indicate that single

teachers and married teachers have experienced more intense personal involvement than widowed teachers and divorced teachers. Their mean scores are 10.34, 10.10, 9.31, and 9.34, respectively. Data presented in table 16 indicate that there are no significant differences among mean scores of teachers categorized by marital status. These suggest that marital status may not have contributed to the amount of frequency and intensity felt by teachers regarding personal involvement.

Table 17 shows the comparisons of mean scores of teachers categorized by number of dependents with regard to the four burnout factors. In terms of the emotional exhaustion factor, the data show that there are no statistically significant differences among mean scores for both frequency and intensity. The data also show that teachers who have more than six dependents have the highest mean scores for both frequency and intensity on the emotional exhaustion factor (24.50 and 33.50, respectively). Teachers who have four to six dependents have the lowest mean score for both frequency and intensity of emotional exhaustion.

As shown in table 17, the data also indicate that there are no statistically significant differences among mean scores regarding the frequency and intensity on the depersonalization factor. Teachers who do not have any dependents have the lowest mean score in frequency on the depersonalization factor. Teachers who have one to three, four to six, and more than six dependents have mean scores of 7.20, 6.58, and 7.00, respectively. On the other hand, teachers who have four to six dependents have the highest mean score in intensity on the depersonalization factor (10.60). Teachers who have one to three dependents have a mean score somewhat higher than those who

TABLE 17

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR NUMBER OF DEPENDENTS

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Number of Dependents	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
96	None	19.86	27.13	6.07	8.08	35.62	40.10	8.12	10.02
110	1-3	19.10	26.35	7.20	9.53	35.93	40.34	7.64	10.05
38	4-6	17.79	24.55	6.58	10.60	36.24	41.58	8.02	10.26
2	More than 6	24.50	33.50	7.00	8.00	21.50	24.50	6.00	11.00
F-Values		< 1	< 1	< 1	1.55	2.67[a]	3.47[a]	< 1	< 1

[a]significant at .05

have no dependents and those who have more than six dependents (9.53, 8.08, and 8.00, respectively).

Table 17 shows the comparisons of mean scores of teachers categorized by number of dependents with regard to frequency and intensity on the personal accomplishment factor. The data indicate that there are some statistically significant differences among mean scores for both frequency and intensity on the personal accomplishment factor. The data also reveal that teachers who have four to six dependents have the highest mean score for both frequency and intensity on the personal accomplishment factor (36.24 and 41.58, respectively). Teachers who have more than six dependents have the lowest mean score for both frequency and intensity on the personal accomplishment factor (21.50 and 24.50, respectively). The data also show that teachers who do not have any dependents and those who have one to three dependents tend to experience personal accomplishment almost to the same degree for both frequency and intensity (35.62 and 40.10, 35.93 and 40.34, respectively).

According to the data in table 17, there are no statistically significant differences among the mean scores for frequency and intensity on the personal involvement factor. The data reveal that teachers who do not have any dependents have the highest mean score (8.12) on the personal involvement factor (frequency). The mean scores for teachers who have one to three, four to six, and more than six dependents are 7.64, 8.02, and 6.00, respectively. In terms of the intensity on the personal involvement factor, the data show that teachers who have more than six dependents have the highest mean score in intensity on the personal involvement factor. Teachers

who have four to six, one to three, and those who do not have any dependents have mean scores of 10.26, 10.05, and 10.02, respectively.

Age and the average number of students in the classroom are the only two demographic variables that have no significant relationships to any of the burnout factors. According to data presented in table 18, teachers in the age group between twenty and thirty have the lowest mean score (19.22) on the emotional exhaustion factor (frequency), but they have the highest mean score (28.31) on the emotional exhaustion factor (intensity). Teachers in the age group of thirty-one and above have lower mean scores in frequency and intensity on emotional exhaustion with scores of 18.85 and 24.74, 19.40 and 24.32, respectively. In terms of the depersonalization factor, teachers in the age group between thirty-one and forty have the lowest mean score (5.89) in frequency. On the other hand, teachers in the age group between twenty and thirty tend to have the highest mean score (7.02) in intensity on the depersonalization factor. Teachers who are forty-one years and up have a mean score of 6.44 on the depersonalization factor (frequency). Teachers in the age group of twenty and thirty have the highest mean score in intensity on the depersonalization factor. Teachers who are in this age group of thirty and above have mean scores of 8.46 and 7.89, respectively.

In terms of personal accomplishment (frequency), the data show that teachers who are forty-one years and above have a higher mean score than those who are in the age group of thirty-one and forty, twenty to thirty years, and thirty to forty years (36.45, 35.93, and 35.20, respectively). On the other hand, teachers who are in the age group of twenty and thirty years have a higher mean

TABLE 18

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR DIFFERENT AGE GROUPS

		Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
N	Age Groups	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
126	20-30	19.22	28.31	7.02	10.12	35.20	40.69	7.75	9.86
34	31-40	18.85	24.74	5.89	8.46	35.93	39.70	7.78	10.54
86	41 and up	19.40	24.32	6.44	7.89	36.45	39.99	8.10	10.23
F-Values		< 1	2.32	< 1	2.62	< 1	< 1	< 1	< 1

score (intensity) than those who are in the age group of thirty-one and forty and forty-one and above (40.69, 39.70, and 39.99, respectively).

According to data presented in table 18, teachers who are forty-one years and up have a higher mean score than those who are in the age group between thirty-one and forty years and twenty and thirty years (8.10, 7.78, and 7.75, respectively) on the personal involvement factor (frequency). The data also reveal the comparisons of mean scores of categories of teachers' age with regard to the intensity of the personal involvement factor. Teachers who are thirty-one years and up have higher mean scores than teachers who are in the age group between twenty and thirty years (10.54, 10.23, and 9.86, respectively).

Table 19 shows the comparisons of mean scores of the average number of students in the classroom with regard to the four burnout factors. The data indicate that there are no statistically significant differences among mean scores regarding frequency and intensity on the four burnout factors. In terms of the emotional exhaustion factor, teachers who have more than thirty students have the lowest mean score for frequency and intensity (16.94 and 19.76, respectively). Teachers who have an average number of students in the range between eleven and thirty have higher mean scores regarding frequency on the emotional exhaustion factor than do teachers who have an average number between one and ten students (19.40, 19.43, and 18.99, respectively). In terms of intensity on the emotional exhaustion factor, teachers who have an average number of students between eleven and twenty have a slightly higher mean score than those who have an average number of students between one and ten and twenty-one and thirty (27.02, 26.86, and 26.31, respectively). No statistically significant differences are reported on the depersonalization factor

for frequency and intensity.

According to the data in table 19, teachers whose average number of students is more than thirty have the lowest mean score on the depersonalization factor for both frequency and intensity (4.19 and 7.69, respectively). The data also indicate that teachers who have an average number of students which range from eleven to twenty have a higher mean score in both frequency and intensity on the depersonalization factor than those who have an average number of students between twenty-one and thirty and one and ten (6.50 and 8.84, 6.45 and 8.67, respectively).

The comparisons of mean scores of categories of the average number of students in the classroom regarding the frequency and intensity of the personal accomplishment factor are also shown in table 19. No significant differences exist among the categories of average number of students on the personal accomplishment factor (frequency and intensity). Teachers who have an average number of students more than thirty have the highest mean score (38.60) in frequency on the personal accomplishment factor. The mean scores of teachers who have an average number of students between twenty-one and thirty, eleven and twenty, and one and ten are 36.55, 35.06, and 34.06, respectively. In terms of the personal accomplishment factor, the mean score decreases as the average number of students decreases (42.87, 40.86, 39.91, and 38.93, respectively).

According to the data shown in table 19, teachers who have an average number of students between one and ten have the highest mean scores for both frequency and intensity on the personal involvement factor. There are no significant differences among the categories of average number of students on the personal involvement factor

TABLE 19

MEASURES OF BURNOUT WITH MEANS AND F-VALUES FOR THE AVERAGE NUMBER OF STUDENTS IN THE CLASSROOM

N	Average Number of Students	Emotional Exhaustion		Depersonalization		Personal Accomplishment		Personal Involvement	
		Frequency	Intensity	Frequency	Intensity	Frequency	Intensity	Frequency	Intensity
37	1-10	18.99	26.86	6.45	8.67	34.06	38.93	8.32	10.62
83	11-20	19.40	27.02	7.15	9.85	35.06	39.91	7.77	10.12
118	21-30	19.43	26.31	6.50	8.84	36.55	40.86	7.85	9.97
8	More than 30	16.94	19.76	4.19	7.69	38.60	42.87	7.30	8.66
F-Values		< 1	< 1	< 1	< 1	1.83	1.10	< 1	< 1

(frequency and intensity). Teachers who have an average number of students ranging between twenty-one and thirty have a higher mean score in frequency on the personal involvement factor than teachers who have an average number of students between eleven and twenty and more than twenty (7.85, 7.77, and 7.30, respectively). In terms of intensity on the personal involvement factor, the mean scores decrease as the average number of students increases (10.62, 10.12, 9.97, and 8.66, respectively).

Summary of Respondents' Comments

Following the final question on the survey, respondents were invited to offer comments. This section of the findings represents a summarization of the comments submitted.

Teachers generally responded that teaching is a joy and a rewarding job. Yet there were some teachers who indicated they were burned out; that is, they were feeling physically and emotionally drained. There were four teachers who mentioned that they were in the process of looking for a new job because they were not satisfied with the job's location, low pay, and lack of administrative support. One teacher had been teaching the same class for five years, which reportedly caused monotony and lack of challenge and intellectual growth. Most of the comments revealed causes of stress and frustration. Some of the major causes of stress expressed by those teachers were as follows:

1. The principal's inconsistency in policies
2. The lack of support from parents and the administration
3. The experience of being involuntarily transferred--One teacher reported that she was transferred from the elementary school

to the high school. It made her nervous and lacking in self-confidence because she had never been trained for high school. She reported that she took sick leave for more than twenty days

4. The lack of availability of a preparation period and inadequate facilities

5. The assignments of extra duties

6. The excessive paperwork

7. The emotional needs and demands of students

8. The demands of the administration and professional organizations

9. The teacher evaluation process

10. The academic ability of students

11. The large class sizes

12. The apathy and lack of interest in learning on the part of students

13. The feelings of isolation from teaching in a self-contained classroom

Some respondents suggested that teachers should take a year off every five years to work in another field. They generally agreed that the source of their problems did not come from students, but rather from the school administration. Some of the respondents were concerned with the uncaring attitude of the general public toward education. They worried about the quality of new teachers. Some respondents opined that college seemed to continually flood the market with trained graduates who were incompetent teachers. Some responded that if the colleges reevaluated the goals of the society, a better program in teacher training could be established.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purposes of this study were to determine the extent to which the burnout syndrome has existed among North Dakota public school classroom teachers; to identify the significant factors affecting the burnout syndrome as perceived by North Dakota public school classroom teachers; and to determine the significant relationships between the four burnout factors (emotional exhaustion, depersonalization, personal accomplishment, personal involvement) and the demographic variables which include age, sex, marital status, number of dependents, years of teaching experience, level of teaching, average number of students in the classroom, salary, educational background, and size of the community.

Summary

Teacher burnout is a term currently used to describe teachers' feelings and attitudes about themselves in relation to their work. The concept of teacher burnout is not new to teachers and others in the field of education. Some definitions of the term which were provided by authorities in the field were included in the review of the literature. During the 1970s, the term burnout was used by Freudenburger to describe workers' responses in alternative health care settings (Gann 1979, Edelwich and Brodsky 1980). Welch et al.

(1980) stated that the burnout syndrome can affect the individual teacher's life at least in five major ways: physical, intellectual, emotional, social, and spiritual. According to the special report, "Teacher Burnout: How to Cope When Your World Goes Black," which appeared in the January 1979 issue of Instructor, LeRoy Spaniol classified burnout into three levels: first-degree burn (mild), second-degree burn (moderate), and third-degree burn (severe).

The well-being of teachers has been a concern of educators and researchers for a long time. Consequently, teachers' health has been studied extensively since the early 1900s. In the 1970s, the concern about teachers' well-being increased. Studies about teacher anxiety and teacher stress were done. The term "anxiety" was used metaphorically to denote experiences of tenseness (Sarbin 1968). Coates and Thoresen (1976) also indicated that anxiety might be termed a stress or tension response experienced directly by the person cognitively, motorically, or physiologically in response to specific life situations. The feeling resulting from the prolonged stress and the failure to learn how to reduce this stress was described as burnout.

Some attitudes or beliefs that may lead to burnout were discussed by Medeiros et al. (1980). Freudenburger (1975) also identified types of personality as being more prone to burnout. McGuire (1979) stated that stress and burnout could not be separated. Kyriacou and Sutcliffe (1978) studied about teacher stress and argued that the personality characteristics rather than the biological characteristics of the individual may be the important determinant of individual differences in teacher stress.

In 1972 the New York State United Teachers conducted a survey on teacher stress and from the findings concluded that there were two most stress-producing factors in schools: (1) Managing disruptive children and (2) Working with incompetent administrators - Lack of administrative support. Based on the results of the study on teacher stress conducted by the Florida Education Association/United in 1980, it was reported that teachers felt that teaching was a very stressful or extremely stressful job. The findings also indicated that the most common sources of job stress as perceived by Florida teachers included inadequate salary, student discipline, and large amounts of paperwork required of teachers. Additionally, the findings indicated that the most common symptoms of job stress experienced were exhaustion and frustration. The major sources of burnout experienced by professionals, as described by Metz (1979), included administrative incompetence, bureaucratization, discipline problems, lack of administrative support, lack of positive feedback, lack of opportunity for change by choice, and powerlessness.

Metz (1979) conducted a study about the burnout syndrome. His purpose was to discover the common characteristics of those who were professionally renewed. The interesting results pointed out that administrative support and peer interaction and relationship were significant sources of renewal. Otto (1980) further examined the phenomenon of professional burnout and how to alleviate it. The results indicated that burnout was a recognizable phenomenon and burnout susceptibility was related to personal dispositions rather than situational factors such as specific work settings, age, or time on the job. The results also indicated that causes of burnout were due primarily to personal reactions to perceived problems and the

organizational milieu. A most interesting finding in Otto's study was that avoidance techniques were equally the responsibility of the person and the organization, but treatment techniques were almost exclusively the responsibility of the organization. Efforts have been made and are being made by concerned educational organizations in remediating the problem of teacher burnout. Workshops on teacher stress and burnout have been conducted throughout the country with a primary goal of helping teachers learn how to manage stress and burnout more effectively.

The subjects used in this study were North Dakota public school classroom teachers. The Maslach Burnout Inventory questionnaire and the demographic data sheet were sent to 350 randomly selected public school classroom teachers throughout the state. Of the 350 persons requested to return questionnaires, 284 public school classroom teachers returned them; but only 246 questionnaires could be used because of incomplete responses.

The statistics which were employed in this study were multiple linear regression and analysis of variance. The .05 level of significance was considered statistically sufficient to reject the null hypotheses.

A summary of findings from this study are presented in the same sequence as the hypotheses:

1. There were significant relationships found within each of the burnout factors--emotional exhaustion, depersonalization, personal accomplishment, and personal involvement. The emotional exhaustion factor (both frequency and intensity) correlated significantly with the depersonalization factor (both frequency and intensity). There was a negative relationship for the personal

accomplishment factor (both frequency and intensity) with the emotional exhaustion factor (both frequency and intensity) and the depersonalization factor (both frequency and intensity). The personal involvement factor (intensity) generally had a positive relationship with both frequency and intensity on the emotional exhaustion, depersonalization, and personal accomplishment factors. The personal involvement factor (frequency) was more independent than the others

2. There were significant relationships found between some of the demographic variables and the emotional exhaustion factor (both frequency and intensity). Sex, educational background, level of teaching, and salary have significant relationships with the emotional exhaustion factor (frequency). Educational background, level of teaching, number of years of teaching experience, and size of the community were found to be significantly related to the emotional exhaustion factor (intensity). No significant relationships were found between emotional exhaustion (frequency and intensity) and age, marital status, number of dependents, or average number of students. In addition, no significant relationship was found between emotional exhaustion (intensity) and sex or emotional exhaustion (frequency) and number of years of teaching experience and size of community. Identification of which aspect of the significant demographic variable contributes in the most significant degree to burnout is reported in the remainder of the paragraph. It was found that males tend to experience emotional exhaustion more frequently than females. Teachers with the master's degree seem to be the persons who experience emotional exhaustion more frequently and also have the highest degree of intensity of emotional exhaustion. Teachers designated as "other" experience the highest degree of intensity in emotional exhaustion and experience

it more frequently than others. Teachers who earn a salary of $19,000 and more experience emotional exhaustion more frequently and intensely than the others. Teachers with four to six years of teaching experience and those who live in a community with a population of 501 to 2,500 have the highest degree of intensity in emotional exhaustion

3. There were significant relationships found between some of the demographic variables and the depersonalization factor (both frequency and intensity). Sex and level of teaching were found significantly related to the depersonalization factor (both frequency and intensity). No significant relationships were found between depersonalization (both frequency and intensity) and age, marital status, number of dependents, highest degree, number of years of teaching experience, average number of students, salary, or size of community. Identification of which aspect of the significant demographic variables contributes in the most significant degree to burnout is reported in the remainder of the paragraph. It was found that males tend to experience depersonalization with greater frequency and to a higher degree of intensity than females. Teachers who have been assigned to teach more than one level or more than one subject (designated as "other") experience more depersonalization more frequently and to a higher degree of intensity than do teachers at other levels of teaching

4. There were significant relationships found between the demographic variables and the personal accomplishment factor (both frequency and intensity). Sex and number of dependents were found to be significantly related to the personal accomplishment factor (both frequency and intensity). Level of teaching and size of the

community were also found to be significantly related to the personal accomplishment factor (frequency). No significant relationships were found between personal accomplishment (both frequency and intensity) and age, marital status, highest degree, number of years of teaching experience, average number of students, and salary. In addition, no significant relationships were found between personal accomplishment (intensity) and level of teaching or size of community. Identification of which aspect of the significant demographic variable and its contribution to the most significant degree regarding burnout is reported in the remainder of this paragraph. It was found that males experienced personal accomplishment less frequently and to a lower degree of intensity than did females. Teachers who were responsible for six or more dependents experienced both the least frequency of and the lowest degree of intensity of personal accomplishment. Teachers who were assigned to teach multiple levels or multiple subjects (designated as "other") experienced personal accomplishment less frequently than did teachers at other levels of teaching. Teachers who worked in communities with a population of less than 500 experienced personal accomplishment less frequently than did teachers in larger communities

5. There were significant relationships found between some of the demographic variables and the personal involvement factor (frequency). Sex and size of community were found to be significantly related to personal involvement (frequency). The personal involvement factor (intensity) did not significantly correlate with any one of the demographic variables. Furthermore, no significant relationships were found between personal involvement (frequency) and age, marital status, number of dependents, highest degree, level of teaching,

number of years of teaching experience, average number of students, and salary. Identification of which aspect of the significant demographic variables contribute in the most significant degree to burnout is reported in the remainder of this paragraph. It was found that males experience personal involvement less often than do females. Teachers who have lived in communities of 10,001 to 20,000 have experienced personal involvement less than teachers from any other size community

North Dakota public school classroom teachers generally reported that teaching is a joy and a rewarding job. There were some teachers who reported that they believed they were burned out because they were feeling physically and emotionally drained. There were four teachers who reported they were in the process of looking for a new job because they felt burned out and did not feel satisfied with job location, low pay, and administrative support. Some other causes of stress and frustration expressed by North Dakota public school classroom teachers included the principal's inconsistency in administering policies, potential for involuntary transfer, lack of availability of preparative period and facilities, extra duty assignments, amount of paperwork, emotional demands and needs of the students, needs of the administration and professional organizations, threat of teacher evaluations, academic level of the students, large class size, and apathy and lack of interest in learning on the part of the student.

Limitations

There are a number of elements which limit the study. Some are related to the existing circumstances and some to the nature of the study itself. The limitations of the study which were identified

are listed as follows:

1. It is limited by the recency of the literature on teacher burnout which suggests that burnout is a contemporary problem

2. It is limited by the time of the school year and the actual surroundings in which teachers responded to the survey questionnaire

3. It is limited to the public school classroom teachers in the state of North Dakota

4. It is limited by the willingness of the sample group to respond and by the frankness of responses from teachers who returned the survey questionnaire

5. It is limited by the disproportionality of different groups of teachers, as classified by the demographic variables, resulting from the random sampling technique

6. It is limited by the instrument used and the demographic variables selected for study. The Maslach Burnout Inventory does not provide precise data about the degree of burnout syndrome which exists or even whether an individual teacher is burned out

Conclusions

The following conclusions emerged from the findings of this research study on teacher burnout. They are presented in the same order as the purposes of the study which were stated in chapter 1.

1. Since there was no norm or standard score to specifically identify a burnout level, it was not appropriate to conclude that any North Dakota public school classroom teachers were burned out. There were four teachers who reported they were in the process of looking for a new job because of feeling burned out. It seems clear that some teachers were experiencing feelings of burnout to a much

more intense degree than others. The data suggest that there were some indicators of burnout which teachers could identify

2. It appears that the emotional exhaustion factor, the depersonalization factor, and the personal accomplishment factor were major contributors to the burnout syndrome as perceived by North Dakota public school classroom teachers

3. The results showed that the age of the teacher and the average number of students in the classroom did not have a significant impact on teacher burnout as perceived by North Dakota public school classroom teachers. It was observed from the data that no matter how old or how young the teachers were, they experienced approximately the same possibility of feeling burned out. The data also showed that the average number of students in a classroom, either large or small, did not make a significant difference regarding teacher burnout. This may suggest that arguments to reduce class size because it has a negative effect on the teachers' mental health are essentially unfounded

4. It was clear that level of teaching and sex of teachers were significant more frequently than other demographic variables resulting in a higher degree of burnout as perceived by North Dakota public school classroom teachers. Those teachers who did not designate themselves as a primary teacher (K-3), an intermediate teacher (4-6), a junior high school teacher (7-9), or a senior high school teacher (10-12) were categorized as "other." Respondents in the "other" category appeared to feel burnout more frequently and intensely than their counterparts. It was noted from a visual examination of the data submitted by teachers in the category identified as "other" that all teachers had widely diverse teaching

assignments, including teaching across six to eight grade levels and perhaps teaching in several unrelated fields of study. The demands required in order to feel satisfaction in a personally and professionally acceptable way for those teachers may have contributed to feelings of burnout

5. Two other demographic variables which had a significant impact upon the burnout syndrome included number of years of teaching experience and salary. Teachers who have been teaching for four to six years appear to feel more burnout than others. There also seems to be some relationships between the number of years of teaching experience and the salary since the higher the salary earned by teachers the more burnout they experience. This may result from values conflicts and other internal conflicts generated from a discrepancy between their ideal values and their perception of the real world. These feelings may be exacerbated by feelings of helplessness in overcoming some of the perceived real-world problems. In addition, many teachers at an early stage in their career are facing financial, family, and other obligations which prevent them from having the opportunity to revitalize themselves, mentally and psychologically. And, as salaries increase, the teacher may take on additional financial responsibility for such major purchases as a house and furniture perhaps for the first time in his/her life thus potentially contributing to stress, anxiety, and feelings of burnout

6. The results of this study also showed that educational background, number of dependents, and size of community were factors which contributed to feelings of being burned out. Teachers who held a master's degree; lived in a community with a population between 501 and 2,500 or 10,000 and 20,000; and have more than six dependents

seem to experience burnout more frequently and intensely than other groups of teachers. This may result from stress and/or tension that they experience due to the fact that they feel so much social and personal responsibility for their large immediate families and so much social and professional responsibility toward people who live in that particular size community. In addition, the stress from having a master's degree may be related to personal and professional hopes and expectations of teachers to engage in scholarly activity which may be perceived as virtually impossible given their current work load and personal obligations

7. Although marital status did not have a direct impact upon teacher burnout as perceived by North Dakota public school classroom teachers, it did make a unique contribution, statistically speaking, to the burnout syndrome. There was a trend for unmarried teachers to experience more burnout than married teachers. That may result from the lack of support from a spouse and/or from the choice of lifestyle

8. Teachers who participated in this study did not express concerns about students' discipline problems in the comment section of the questionnaire. It appears instead that North Dakota teachers perceive more problems in their relationships with their administrators. This difficulty may result from inadequate communication between teachers and the administrators

Recommendations

Several recommendations are proposed as a result of this study. The writer hopes that these recommendations will be helpful in future research efforts and in the more immediate actions which could be taken by administrators for the benefit of teachers in

particular and ultimately for the success and progress of students as well as education in general:

1. Since this study is only the beginning step in the research on teacher burnout in the state of North Dakota, further research on this topic, especially the construction of a burnout scale which can better measure the degree of burnout, is recommended

2. Although the present study employed an adequate sample size and used appropriate statistical techniques and sampling methods, a replication study involving more groups of educational personnel from different settings and conducted in different times of the year might provide more conclusive results

3. It is recommended that future research on this topic in the state of North Dakota should include a survey questionnaire on teacher morale. The results from using the three instruments--Maslach Burnout Inventory, a survey questionnaire on teacher morale, and the demographic data--would allow for correlation studies which could reveal undesirable situations or problems of teachers which may be helpful to administrators and other concerned educational organizations in remediating the problem of teacher burnout

4. Teacher burnout seems likely to be a serious problem and it can occur at any point in time, varying as much as do individual teachers. Each school should periodically evaluate its operation by securing data from teachers. The results from the evaluation should provide a good basis for discussion of the desired changes

5. All concerned organizations including the State Legislature, the State Department of Public Instruction, the colleges and universities, the school boards, and the administrators should be aware of the problem of teacher burnout. A statement showing

understanding of the problem and the willingness of each group to help teachers overcome the problem should be issued. The fact that significant groups and individuals can demonstrate a knowledge and understanding of the problem and make a solid commitment to provide assistance should, in itself, bolster teacher morale

6. A better communication between the appropriate administrators and teachers who are employed in the system they administer should be established in order to eliminate any misunderstanding regarding policies and the decision-making process

7. The administrators must have a balanced perspective between the needs of the teacher and the needs of the school when dealing with teachers' assignments. Overload teacher assignments should be avoided. If this is impossible, such assignments should be frequently rotated among teachers in that particular school because it is known that too much work over a long period of time will likely cause physical and psychological exhaustion and has a strong likelihood of destroying teachers' creativity and enthusiasm about their work

8. The individual teacher should be alert to the problem of teacher burnout. He/she should try to maintain his/her physical fitness and his/her good psychological health. Having a sense of humor and maintaining an optimistic outlook are some suggested behaviors which the individual teacher could practice in order to keep himself/herself from experiencing the problem of burnout

9. It is recommended that colleges and universities should take constructive action regarding the burnout problem. A screening process should be initiated before accepting any student into the teacher education program. Students who really desire to pursue a

teaching career and have sufficient academic qualifications as well as an appropriate personality to be a teacher should be the only persons admitted into the program. In addition, the faculty should attempt to secure students who have a strong determination to succeed and a willingness to face any problem as a teacher because such individuals are more likely to survive as teachers and will likely have fewer problems than those who become teachers unintentionally

10. Finally, colleges and universities should also respond to the burnout potential among teachers currently in the field and provide a better and preventative up-to-date inservice training program for this group of teachers every year. The cooperation from colleges and universities could be very significant in helping other educational organizations, concerned educational personnel, and individual teachers to deal with the problem of teacher burnout

APPENDIX A

MASLACH BURNOUT INVENTORY

UNIVERSITY OF CALIFORNIA, BERKELEY

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DEPARTMENT OF PSYCHOLOGY

BERKELEY, CALIFORNIA 94720

January 9, 1981

Mr. Thosapol Arreenich
2601 6th Avenue North
Grand Forks, ND 58201

Dear Mr. Arreenich:

Your letter of December 11 arrived while I was away on vacation, so I apologize for the delay in response. I tried unsuccessfully to call you today and hope that this letter will answer your query.

According to my secretary, she has sent you all of the material we have on the MBI -- a copy of the scale itself, the article that describes its psychometric properties, and a letter of permission. There is no test manual (although we are arranging for Consulting Psychologists Press to prepare one when they begin to handle distribution of the MBI). The article indicates which items constitute each subscale, so that you can compute mean subscale scores (one for frequency, one for intensity) for each subject. The subscale scores are not recoded in any way nor are there any arbitrary cut-off points. Your letter does not indicate what other information you are seeking from a test manual, so I am unclear as to the specific material you are requesting.

Just in case the permission letter was omitted inadvertently, you have my permission to use the MBI in your research, provided I receive a full report of that research project. The appropriate citation for the scale is: Maslach, C., & Jackson, S. E. The measurement of experienced burnout. Journal of Occupational Behaviour, 1981, in press.

Sincerely,

Christina Maslach

Christina Maslach
Associate Professor

CM:c

Demographic Data*

NAME_____ ADDRESS_____

Directions: In each of the items identified as A through J check ( ) the one best response which describes you or your situation

A. Age:
___(1) 20-30 ___(2) 31-40 ___(3) 41 and over

B. Sex:
___(1) Male ___(2) Female

C. Marital Status:
___(1) Single ___(2) Married ___(3) Widowed ___(4) Divorced

D. Number of dependents:
___(1) None ___(2) 1-3 ___(3) 4-6 ___(4) more than 6

E. Highest degree held:
___(1) Bachelor's ___(2) Master's ___(3) Specialist's

___(4) Doctorate ___(5) Other, please explain_____

_____

F. Level of teaching:
___(1) K-3 ___(2) 4-6 ___(3) 7-9 ___(4) 10-12

___(5) Other, please explain_____

G. Number of years teaching:
___(1) 1-3 ___(2) 4-6 ___(3) 7-9 ___(4) 10-12 ___(5) more than 12 years

H. Average number of students in your class(es):
___(1) 1-10 ___(2) 11-20 ___(3) 21-30 ___(4) more than 30

I. Salary per year:
___(1) $7,000-11,000 ___(2) $11,001-15,000

___(3) $15,001-19,000 ___(4) more than $19,000

J. Size of the community in which your school is located:
___(1) under 500 ___(2) 501-2,500 ___(3) 2,501-5,000

___(4) 5,001-10,000 ___(5) 10,001-20,000 ___(6) 20,001-40,000

___(7) more than 40,000

*Designed for North Dakota only (go to back of this page)

Maslach Burnout Inventory

On the following pages are several statements of job-related feelings you might have. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, check the box marked "NEVER" and go on to the next statement. However, if you have experienced this feeling, indicate HOW OFTEN you feel it by circling the appropriate number on the 6-point scale. Then, decide HOW STRONG the feeling is when you experience it by circling the appropriate number on the 7-point scale. An example is shown below.

Frequency of Feeling: HOW OFTEN:

NEVER	A FEW TIMES A YEAR OR	ONCE A MONTH OR LESS	A FEW TIMES A MONTH	ONCE A WEEK	A FEW TIMES A WEEK	EVERY DAY

Intensity of Feeling: HOW STRONG:

1	2	3	4	5	6	7
VERY MILD, BARELY NOTICEABLE			MODERATE			MAJOR, VERY STRONG

Example:

00. I feel depressed at work

NEVER ___ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

If you occasionally feel depressed at work (say a few times a month) you would circle the number 3. If, when you do feel depressed, it is a fairly strong feeling, but not as strong as you can imagine, you would circle a 6.

(go to top of next page)

	1	2	3	4	5	6
HOW OFTEN:	A few times a year	Monthly	A few times a month	Weekly	A few times a week	Daily

HOW STRONG: 1 Very Mild — 4 Moderate — 7 Very Strong

1. I feel emotionally drained from my work.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

3. I feel similar to my students in many ways.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

4. I feel personally involved with my students' problems.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

6. I feel uncomfortable about the way I have treated some students.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

7. I can easily understand how my students feel about things.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

8. I feel I treat some students as if they were impersonal "objects."

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

	1	2	3	4	5	6
HOW OFTEN:	A few times a year	Monthly	A few times a month	Weekly	A few times a week	Daily

	1	4	7
HOW STRONG:	Very Mild	Moderate	Very Strong

10. I deal very effectively with the problems of my students.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

11. I feel burned out from my work.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

14. I worry that this job is hardening me emotionally.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

15. I feel very energetic.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

16. I feel frustrated by my job.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

17. I feel I'm working too hard on my job.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

	1	2	3	4	5	6
HOW OFTEN:	A few times a year	Monthly	A few times a month	Weekly	A few times a week	Daily

	1	4	7
HOW STRONG:	Very Mild	Moderate	Very Strong

19. Working directly with people puts too much stress on me.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

20. I can easily create a relaxed atmosphere with my students

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

21. I feel exhilarated after working closely with my students.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

22. I have accomplished many worthwhile things in this job.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

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

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

25. I feel students blame me for some of their problems.

NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
HOW STRONG: 1 2 3 4 5 6 7

COMMENTS: _____

_____

_____

APPENDIX B

LETTER OF INTENT TO CONDUCT THE STUDY

THE
UNIVERSITY
OF
NORTH
DAKOTA

THE CENTER FOR TEACHING AND LEARNING
Box 8158, University Station
Grand Forks, North Dakota 58202

May 1, 1981

Dear :

You have been chosen as part of a random sample of classroom teachers in the state of North Dakota to respond to the Maslach Burnout Inventory. As a doctoral student at the University of North Dakota in Educational Administration, I have become interested in the issues related to teacher stress and teacher burnout. The inventory and the demographic data will help me study these phenomena as they relate to teachers in North Dakota and simultaneously assist me to complete my doctoral dissertation.

The results of this study may be of great assistance to state officials, state organizations, and individual school districts as they examine the needs of teachers and what can be done to reduce stress and burnout among that group. For this reason, I hope you will understand the importance of your participation in the study. An early and forthright response will be greatly appreciated. Please be assured that the information you provide will be treated confidentially.

Enclosed is a stamped, self-addressed envelope for your use. Your assistance in helping me to complete this study with meaningful data is most appreciated.

Sincerely,

Thosapol Arreenich
Student, University of North Dakota

Enc.

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