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PERCEIVED LEVELS OF BURNOUT AND NEEDS DEFICIENCY OF ENGLISH TEACHERS IN SASKATCHEWAN

A Thesis

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Abstract

The primary purpose of this study was to examine the relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan. Its secondary purposes were to examine the levels of burnout and needs deficiency of English teachers in relation to 13 job-related factors, and to examine the levels of burnout and needs deficiency, as well as the job-related factors, in relation to 13 background variables. The study assumed a sociological stance so that it would be of particular interest to school administrators, who can only hope to improve teaching conditions if they are aware first of those factors related to teaching and the teaching profession which contribute to burnout and needs deficiency.

The sample for the study consisted of 250 of the 949 teachers in Saskatchewan who taught English for 30% or more of the teaching day. The data for the study were obtained from teachers' answers to a four-part Teacher Burnout and Needs Deficiency Questionnaire sent to them in April, 1985. Part II of this questionnaire, an adaptation of the Maslach Burnout Inventory, measured English teachers' perceived burnout levels. Information on teachers' perceived needs deficiency was obtained from the Porter Need Satisfaction

Questionnaire, which was Part III of the Teacher Burnout and Needs Deficiency Questionnaire. Oneway analyses of variance and multiple regression analyses were used to analyze the data.

The results of the study supported 17 of 23 hypotheses. The results showed that teacher burnout, particularly as it is manifested by Emotional Exhaustion and Depersonalization, is closely related to the inability of English teachers to fulfill their higher-level needs, especially their need for self-actualization, through their jobs. Moreover, the results suggested that such job-related factors as Role Conflict and Role Ambiguity, Work Overload and Time Demands, the Lack of Promotional Opportunities in Teaching, Student Discipline Problems, the Lack of Participation in Decision Making, the Low Status of the Teaching Profession, the Lack of Administrative Support, the Lack of Parental Support, Public Criticism of Teachers and Education, Staff Conflict, and Isolation in the Classroom frustrate English teachers' attempts to fulfill their upper-level Self-actualization, Autonomy, and Esteem needs, thereby contributing to their sense of Emotional Exhaustion and Depersonalization. The results of this study have important implications for both administrators and teachers.

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Chapter I

The Problem

Introduction

Stress is not a new problem for teachers. In recent years, however, the problem has intensified and teacher burnout has become a concern not only for teachers but also for school boards, students, administrators, and the public. According to Farber and Miller (1981), "teacher burnout has already reached serious, if not crisis, proportions" (p. 235). The consequences of teacher stress and burnout are difficult to measure. Coates and Thoresen (1976) found that teacher anxiety had debilitating effects on student achievement. As teacher anxiety and stress rise to the level of burnout, the quality of education probably diminishes. Angry, cynical, bored, depressed, or exhausted teachers are not likely to educate and influence students as well as enthusiastic, energetic, concerned teachers. The actual economic costs of teacher burnout through teachers' absences alone are high (Goodman, 1983).

Despite its importance and its popularity as a topic at conventions and seminars, the study of

teacher burnout is in its initial, descriptive stage. Indeed, the "widespread concern and interest in the phenomenon have served to obscure the gross inadequacy of the data base upon which our assumptions and putative solutions are based" (Farber, 1982, p. 3). Although the concepts of teacher stress and burnout appear to be related to such constructs as teacher job dissatisfaction and needs deficiency, very little empirical evidence exists to define precisely the nature of the relationship. Most of the research is based on untested assumptions. Burnout is usually examined in relation to several predispositional and environmental factors; however, researchers have reached no consensus as to the prime causes or correlates of teacher burnout (cf. Blase, 1982; Cunningham, 1983; Farber & Miller, 1981; Flint, 1982; Griffin, 1983; Kaiser, 1982). Before the problem can be alleviated, its causes or combinations of causes must first be determined. Moreover, before research on teacher motivation, needs deficiency, and job dissatisfaction can be brought to bear on the problem of teacher brunout, the relationship between burnout and these other constructs must be clarified.

Purposes

The purposes of this study were

(1) to examine the relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan;

(2) to examine the levels of burnout and needs deficiency of English teachers in relation to 13 job-related factors;

(3) to examine the levels of burnout and needs deficiency, and the job-related factors, in relation to 13 background variables.

Assumptions

This study assumed that burnout is not solely dependent upon predispositional factors inherent in those individuals who would "burn out" in any profession or organization, but is a function of organizational and role traits amenable to change. It assumed a sociological rather than a psychological or medical stance with regard to the problem of teacher burnout. This study assumed that levels of burnout exist, and that some teachers would perceive high burnout levels.

The instruments themselves incorporated specific assumptions about burnout and needs deficiency. The Maslach Burnout Inventory (MBI) assumed that emotional exhaustion, depersonalization, and decreased personal accomplishment are the prime symptoms of burnout. The Porter Need Satisfaction Questionnaire (PNSQ) assumed

that human beings are motivated by their desire to fulfill needs for security, affiliation, esteem, autonomy, and self-actualization.

Limitations

The questionnaire method of data collection imposed several limitations upon this study:

(1) The questions may have influenced the response.

(2) The questions may have been interpreted differently by individual respondents whose conceptualizations of burnout may have differed from the definitions assumed in this study.

(3) The questions may have been answered inaccurately by respondents who, knowingly or unknowingly, wanted not to be identified or exposed, or wanted to preserve their positive self-image.

(4) No interviews were used to supplement or corroborate the findings.

The use of validated questionnaires and assurances to respondents that their anonymity would be protected should have partially obviated these limitations.

Another limitation might have been respondents' overexposure to the topic of burnout. Returns on questionnaires were not likely to have been very high if teachers had felt that the topic had been overworked. Conversely, if teachers saw that they or their colleagues

might have been helped by this research, then they would have been more likely to respond.

The time of year in which the survey was conducted, May, 1985, might have biased the response. Perhaps perceived burnout levels were lower after the spring break than they would have been, say, in February.

Delimitations

The topics of teacher burnout and teacher motivation are so large that any single study of both constructs must be severely circumscribed. This study was delimited to the population of teachers in Saskatchewan who taught English for 30% or more of the school day. No teachers who had left the profession and no "burned out" teachers on extended sick leave were surveyed. This study was further delimited by its methodology:

(1) The questionnaire was administered only once rather than two or three different times during the school year.

(2) Administrators' perceptions of teachers' burnout levels were not measured.

(3) Predispositional factors such as personality types and crises in private life were not taken into account.

(4) The effects of burnout were not measured.

(5) The support systems for teachers and other

measures inaugurated by school boards and administrators to combat burnout were not considered.

(6) This study was delimited to the Maslach Burnout Inventory (MBI) and to the Porter Need Satisfaction Questionnaire (PNSQ).

Significance of the Study

This study will help teachers and administrators by shedding light on the relationship between burnout and the needs deficiency, job-related, and demographic variables which contribute to or predict it. The more teachers and administrators know about the problem, the better they will be able to begin to solve it. Because this study assumed a sociological stance, it will be of particular interest to school administrators, who can only hope to improve teaching conditions if they are aware first of those factors related to teaching and the teaching profession which contribute to burnout and needs deficiency.

Definitions

Teachers' stress. Although stress may be either a positive or a negative phenomenon, for the purposes of this study it was "a response of negative effects such as anger or depression by a teacher . . . resulting

from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat" (Kyriacou & Sutcliffe, 1978b, p. 2).

Teacher burnout. As operationally defined by the MBI, to be burned out meant to be emotionally exhausted, to treat students in depersonal ways, and to have a diminished sense of personal accomplishment as a result of being unable to handle long-term stress in the classroom.

Motivation. Motivation involved "the complex forces, drives, needs, tension states, or other mechanisms that start and maintain voluntary activity directed toward the achievement of personal goals" (Hoy & Miskel, 1982, p. 137).

Need deficiency. Need deficiency was the difference between teachers' perception of the level of fulfillment they actually derived in a particular need area and their perception of the level of fulfillment they desired.

Self-actualization needs. The need for self-actualization included teachers' perceived need for working at top potential, for giving all, and for attaining peak satisfaction, achievement, and personal and professional success (Sergiovanni & Carver, 1980, p. 84).

Autonomy needs. The need for autonomy included teachers' perceived need for control, influence, participation, and authority (Sergiovanni & Carver, 1980, p. 84).

Esteem needs. The need for esteem included teachers' perceived need for self-respect, respect by others as a person and as a professional, competence, confidence, and recognition (Sergiovanni & Carver, 1980, p. 84).

Affiliation needs. The need for affiliation included teachers' perceived need for acceptance, belonging, friendship, and school membership in both formal and informal work groups (Sergiovanni & Carver, 1980, p. 84).

Security needs. The need for security included teachers' perceived need for money, benefits, tenure, and role consolidation associated with their jobs (Sergiovanni & Carver, 1980, p. 84).

Summary

Chapter I introduced the problem, explained the purposes, assumptions, limitations, delimitations, and significance of the study, and defined the important terms. Chapter II reviews the literature on teacher burnout and motivation, and develops a theoretical construct. Chapter III describes the instruments, the population and the sample, and the method of data collection and analysis. Chapter IV analyzes the data. Chapter V summarizes and concludes the study.

Chapter II

Review of the Literature and the Theoretical Construct

This chapter reviews the literature on teacher burnout and motivation, and develops from the literature review a theoretical construct for this study.

Research on Burnout

Stress in education is not a new phenomenon. Professional educators have been concerned about the problem of excessive stress for much of this century (Smith & Milstein, 1984). In recent years, most of the literature on stress has dwelt on the problem of teacher burnout. Yet, as Blase (1982) noted, "most of the literature on teacher burnout consists of personal reports, casual observations of the phenomenon, or programs and techniques designed to remedy the problem" (p. 94). The study of teacher burnout is in its initial, descriptive stage. Indeed, "despite increased public and professional attention to the problems of stress and burnout, there has been a notable paucity of adequate empirical investigation" (Farber, 1984, p. 326). More empirical research

exists on related topics, such as teacher anxiety (cf. Coates & Thoresen, 1976), job turnover, job dissatisfaction (e.g., Sweeney, 1981), and stress (Moracco, Danford, & D'Arienzo, 1982; Kyriacou & Sutcliffe, 1978a, 1978b), than on teacher burnout per se. Because there are few empirical studies on teacher burnout, many writers on the subject equate it with related constructs. As Meier and Davis (1982) stated, "in the everyday parlance of many people-helping professionals, burnout has become a catchword for all types of job- and self-dissatisfaction" (p. 2). Schug (1983), for instance, assumed that "when the level of teacher dissatisfaction reaches a high point, it can result in speeding the onset of the psychologically debilitating condition popularly referred to as teacher burnout" (p. 133). If Schug is correct, then research on teacher satisfaction and motivation can be brought to bear on the problem of teacher burnout; however, the concept of teacher burnout needs more clarification before this can be done.

Definitions of "Stress" and "Burnout"

Although burnout has become a popular term since it was first coined by Freudenberger (1974),

researchers have not agreed upon a common definition. Much of the literature equates stress with burnout (see, for instance, McIntyre, 1983; Shaw, Bensky, & Dixon, 1981). Conceptualizations of stress vary. Medical theorists view stress in terms of biological factors and psychologists view stress in terms of psychological responses. Usually, however, stress is regarded as a by-product of the interaction between individuals and their work environments. Fimian (1982), for instance, stated:

> Stress is a hypothetical construct that represents an equilibrium state that exists between the individual responding to environmental demands and the actual environment. Disequilibrium may have actual causes, perceived causes or, frequently, a combination of both actual and perceived causes. Stress, therefore, can be positive or negative, desirable or undesirable, and a good or bad reaction to a real or perceived imbalance between the demands of the environment and the individual's capability of responding appropriately to those demands. (p. 101)

Perceptions of stress are relative phenomena: "It is important to keep in mind that one person's distress [i.e., unpleasant stress] may be another person's eustress [i.e., positive stress]" (Sparks & Hammond, 1981, p. 11; cf. Cedoline, 1982, p. 1). Any study of the variables associated with or causing stress must therefore examine not only environmental stressors, that is, the "events in the environment

that require greater [than usual] adaptive responses from the body" (Cohen, 1978, p. 617), but also predispositional factors (Fimian, 1982).

The concept of stress as it relates to teachers has been most fully developed by two British educational researchers, Kyriacou and Sutcliffe (1978b). They defined stress as "a response of negative effects such as anger or depression by a teacher . . . resulting from aspects of the teacher's job and mediated by the perception that the demands made upon the teacher constitute a threat to self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat" (p. 2). Most of the research on teacher stress examines its causes and dwells on environmental stressors.

A relationship exists between stress and burnout; nonetheless, the two terms are not synonymous: "Burnout is most often the result not of stress per se (which may be inevitable in teaching) but of unmediated stress--of being stressed and having no 'out,' no buffers, no support system, no adequate rewards" (Farber, 1984, p. 326). Burnout corresponds to the stage of exhaustion in Selye's (1974) medical concept of stress: "Following long continued exposure to the same stressor, eventually adaptation energy

is exhausted" (p. 39). Generally, burnout is equated with physical, attitudinal, emotional, and intellectual exhaustion resulting from a person's inability to cope with long-term stress in the work environment (Blase, 1982; Dedrick & Dishner, 1982).

Researchers who have tried to distill the essential dimensions of burnout tend to dwell either on its prime cause or on its prime symptoms. In his study of stress and burnout in suburban teachers, Farber (1984) used Edelwich's and Brodsky's (1980) definition of burnout as a "progressive loss of idealism, energy, purpose, and concern as a result of conditions of work" (p. 14). Farber added: "Burnout is a function of feeling inconsequential--feeling that no matter how hard one works, the payoffs in terms of accomplishment, recognition, or appreciation are not there" (p. 325). Several other writers and researchers claimed that burnout is rooted in the clash between high expectations and frustrating results (Flint, 1982; Freudenberger & Richelson, 1980; Griffin, 1983). In her study of burnout in the field of child-care work, Mattingly (1977) saw the roots of burnout in the conflict betweeen the professional child-care worker's requirement to give and the fact that he or she can never give enough

because the needs of children are always greater than the resources of the worker.

Other researchers emphasized not so much the prime cause of burnout as its prime symptoms. Pines, Aronson, and Kafry (1981) stated that burnout is "characterized by physical depletion, by feelings of helplessness and hopelessness, by emotional drain, and by development of negative self-concept and negative attitudes toward work, life and other people" (p. 15). In examining several groups in the helping professions, including poverty lawyers, physicians, prison personnel, social welfare workers, clinical psychologists and psychiatrists in a mental hospital, child-care workers, and psychiatric nurses, Maslach (1976) asked:

> What happens to people who work intensely with others, learning about their psychological, social or physical problems? Ideally, the helpers retain objectivity and distance from the situation without losing their concern for the person they are working with. Instead . . . they are often unable to cope with this continual emotional stress and burnout occurs. They lose all concern, all emotional feeling, for the persons they work with and come to treat them in detaching or even dehumanized ways. (p. 16)

Maslach (pp. 16-18) found that burned-out workers use several techniques to detach themselves from their clients: They apply derogatory labels to

others; they describe clients as precisely and scientifically as possible; they label them by their "immediate medical problems"; they deal in intellectual and less personal terms; they make a sharp distinction between job and personal life; they physically distance themselves from others; they spend less time with patients or clients; they "go by the book"; they become less creative and more "bureaucratic." Although Meier and Davis (1982) argued that Maslach's burnout model ignores the cognitive and behavioral aspects of burnout, several studies have found Maslach's definition, expressed in the MBI, to be a useful and reliable measure of the level of burnout among teachers (cf. Anderson & Iwanicki, 1984; Beasley, 1984; Beasley et al., 1983; Borthwick, Thornell, & Wilkinson, 1982; Crane & Iwanicki, 1984; McIntyre, 1982; Presley, 1982; Schwab & Iwanicki, 1982a, 1982b; Zabel & Zabel, 1981).

The Personal and Job-Related Factors Associated with Burnout

Burnout is a product of both environmental and predispositional factors. More often than not, however, "educators have been led to believe that burnout occurs because the teacher has inadequate

coping mechanisms" (Schwab, 1983, p. 24). In their review of a sample of the literature on teacher stress from the past fifty years, Smith and Milstein (1984) found that "prescriptions for stress reduction tend to focus almost exclusively on the individual" (p. 40). Teachers are advised to overcome burnout through personal development (Seaward, 1984; Smith & Smith, 1981), through collegial support groups (Cunningham, 1983), by improving interpersonal relationships (Youngs, 1978), by consciously seeking renewal (Farrell, 1983; Scherer, 1983), and by maintaining their enthusiasm (Sobel, 1982), their positive concept of self (Riccio, 1983), their dignity (McPherson, 1983), and their sense of humour (Woods, 1983). Fimian (1982) advised teachers to avoid self-inflicted stress. Several authors (Mathews, 1980; Newbrough, 1983; Shaw et al., 1981; Truch, 1980) offered detailed mental, physical, and emotional strategies for reducing personal stress. Although this kind of advice might be helpful for teachers in dealing with the effects of short-term stress, "the chronic and unrelenting kind of stress that characterizes burnout often defies individual intervention methods" (Jorde, 1982, p. 20). An understanding of the environmental factors contributing

to burnout is necessary before it can be reduced or alleviated. As Iwanicki (1983) stated, burnout is "largely a function of the work environment rather than of the teacher's inability to deal effectively with the requirements of the job" (p. 29).

Job-Related Factors Associated with Burnout

Job-related factors causing or contributing to teacher stress and burnout have been categorized in various ways. The Modified Teacher Occupational Stress Factor Questionnaire (Moracco et al., 1982, pp. 278-279) contains thirty items arranged according to five categories: administrative support, working with students, financial security, relationships with teachers, and task overload. Rottier, Kelly, and Tomhave,(1983) divided the sources of stress into three categories: environmental stress factors, interpersonal relationships, and intrapersonal stress factors. Kyriacou and Sutcliffe (1978a, pp. 163-164) subjected 51 sources of stress to a principal components analysis and ordered them according to pupil misbehaviour, poor working conditions, time pressures, and poor school ethos. Fimian (1982, p. 102) used 12 categories to summarize the sources of teacher stress: (1) personal competence; (2)

self-relationship; (3) conflicting values; (4) social approval; (5) isolation; (6) expectations; (7) self-fulfillment; (8) deficiencies in the work environment; (9) ego needs; (10) self-inflicted stress; (11) professional constraints; (12) student-teacher relationships. Cichon and Koff (1980, pp. 99-100) grouped the 36 items of their Teaching Events Stress Inventory into four clusters according to priority concerns related to students' misbehaviour and violence (the highest ranked group of stressors), management tension, "doing a good job," and pedagogical functions (the lowest ranked cluster). Coates and Thoresen (1976) found that "the chief sources of teacher anxiety relate to (a) time demands, (b) difficulties with pupils, (c) large class enrollments, (d) financial constraints, and (e) lack of educational resources" (p. 165). The Wilson Stress Profile (Truch, 1980, pp. 103-105) groups the job-related sources of stress according to student behaviour, employee/administrator relations, teacher/teacher relations, parent/teacher relations, and time management. Cedoline (1982, pp. 95-105) discussed the job-related causes of teacher distress in terms of "control over one's destiny," "communication/ feedback," "work overload and contact overload,"

"role conflict," and "training deficits."

Since the purpose of this study is to examine the relationship between teachers' perceived level of burnout and their motivation (as defined by their perceived needs deficiency), the job-related factors associated with burnout might also be categorized according to Porter's (1962) adaptation of Maslow's (1954) hierarchy of needs. Porter envisaged a hierarchy of security, affiliation, esteem, autonomy, and self-actualization needs.

Security needs. Several factors reputed to be causes of teacher burnout are associated with teachers' need for security. High unemployment and general economic retrenchment in the 1980s have meant that teachers have fewer job opportunities outside of teaching than they once had; therefore, dissatisfied or burned-out teachers often have no choice but to remain in teaching (Liebes, 1983). As a result of the current economic recession, school boards are forced to impose financial constraints. Budget cuts contribute to teacher burnout in several ways: Staff reduction (Scwab & Iwanicki, 1982b) and involuntary transfers (Cedoline, 1982; Cichon & Koff, 1980; Farber & Miller, 1981) have made teachers less secure in their jobs and therefore more

susceptible to burnout (Smith & McCarthy, 1982). Moreover, inadequate teaching resources and instructional materials (Cichon & Koff, 1980; Coates & Thoresen, 1976; Cook & Leffingwell, 1982; Garland, 1981; Swick & Hanley, 1980), improper facilities (Cichon & Koff, 1980; Fimian, 1982; Swick & Hanley, 1980), and poorly designed schools (Connors, 1983) are frequently linked with teacher burnout and with decreased teacher and pupil performance.

Affiliation needs. Several factors contributing to teacher burnout can be linked with teachers' social or affiliation needs. As Sarason (1971), Lortie (1975), and Warren (1975) have observed, teaching is a lonely profession. There is little in the school environment to alleviate teachers' feelings of loneliness and isolation. Their sense of isolation is regarded as a major cause of burnout (Cunningham, 1983; Farber, 1984; Fimian, 1982; Kirk & Walter, 1981). Indeed, as Sparks and Hammond (1981) stated:

> Teachers spend most of their workday isolated with students in classrooms. There is little or no opportunity for constructive, supportive discussions with colleagues regarding teaching problems or job-related feelings. The brief moments that teachers do have together lend themselves readily to superficial complaints about students, administrators, or the school board . . . [which] tends to reinforce teachers' feelings of hopelessness about their situations. (p. 4)

Pines and Maslach (1978) found that professionals who experience high levels of direct client contact are more likely to burn out than those who are able to withdraw periodically from direct involvement with their clients and do something else. That teachers spend most of their time in direct, intense contact with students increases the possibility of burnout occurring (Swick & Hanley, 1980; Weiskopf, 1980). Farber and Miller (1981) argued that burnout is largely attributable to the

> lack of a psychological sense of community. . . . Teachers' needs for affiliation and support are often unfulfilled. . . . In spite of the obvious impact of teacher satisfaction on pupil performance, schools are inadequately designed to meet the needs of teachers. (pp. 238-239)

When the problem of teachers' isolation in the classroom is compounded by the presence of apathetic students, the possibility of burnout increases (Farber & Miller, 1981; Kyriacou & Sutcliffe, 1979a; Moracco et al., 1982). Pamela Bardo (1979), an English teacher in a Southern California high school, left teaching after 17 years because "teenagers have begun using their ultimate weapon against the school, the teachers, and themselves: They are simply refusing to do the work that leads to learning" (p. 252).

Related to the problem of teachers' isolation, overcrowded classrooms (Cichon & Koff, 1980) and teachers' inability to meet all the individual needs of students (Cunningham, 1983; Fimian, 1982; Syrotuik & D'Arcy, 1983) may also contribute to teacher burnout. If conflict or jealousies exist among teachers on a staff, teacher-teacher relationships can be a source of burnout (Garland, 1981; Hudson & Meagher, 1983; Moracco et al., 1982).

Thus, teachers' isolation, students' apathy and need for individual attention, and poor staff relations may contribute to burnout and prevent teachers from fulfilling their social needs.

Esteem needs. Other factors contributing to teacher burnout are associated with teachers' need for self-esteem and the esteem of others. Public criticism of education generally and of teachers specifically may be a significant cause of teacher burnout (Farber & Miller, 1981; Iwanicki, 1983; Schwab & Iwanicki, 1982b). The public perceives that schools are now less effective than they once were (Farber & Miller, 1981). Sparks and Hammond (1981) remarked that

> a large amount of stress for teachers is caused by a continual bombardment of negative messages from students, parents, the media, and from

> colleagues in the educational community. . . . Teachers often look to students and the community for support and encouragement, but in many instances this support does not exist, nor is it likely to be forthcoming. (p. 15)

The public is demanding not only that schools be held accountable but also that "a proliferation of social and economic ills" be solved (Dedrick & Dishner, 1982, p. 420). Society's unrealistic expectations of teachers are a significant cause of burnout (Margolin, 1982). The lack of parental (Garland, 1981) and administrative support for teachers is a particularly significant factor in teacher burnout.

The literature on teacher burnout consistently regards the lack of administrative support and occupational feedback as a primary cause of burnout (Bloch, 1977; Cedoline, 1982; Dedrick & Dishner, 1982; Farber, 1982; Farber & Miller, 1981; Hudson & Meagher, 1983; Moracco et al., 1982; Swick & Hanley, 1980; Truch, 1980; Weiskopf, 1980). Farber (1984) found that "almost 87% of [the 398 public school] teachers surveyed felt that administrative meetings were unhelpful in solving the problems of teachers" (p. 329). Administrators' positive relationships with teachers correlate highly with teachers' job satisfaction (Chapman & Lowther, 1982);

however, administrators' intrusions upon teachers' classroom time and the inadequate supervision of teachers are causes of burnout (Dedrick & Dishner, 1982; Swick & Hanley, 1980).

Thus, many teachers feel a lack of support from administrators and students within the school, and from parents outside the school. It is not surprising, then, that teachers perceive a large gap between the current status of the teaching profession and their desired status: "Teachers are found to be distressed when they look ahead to what they see as their future status, backward at their previous status, and more distantly sideways at the status of others in their defined status set" (Cunningham, 1983, p. 42). Teacher burnout may be partly attributable to insufficient social and economic rewards (Moracco et al., 1982), especially low salaries (Farber & Miller, 1981; Scrivens, 1979; Swick & Hanley, 1981; Truch, 1980).

Autonomy needs. Teachers' needs for authority, autonomy, and control in the classroom are often challenged, and this can be a source of burnout. Grant (1984) argued that

> the root of much of the teachers' current dissatisfaction lies in [their] being charged with increased responsibility while suffering

> a loss of authority. . . . What has happened is that the socially conferred or institutionally organized sources of authority have been undermined, placing too great a burden on teachers, who must individually earn a personal badge of authority. (pp. 32-33)

Research in industrial settings indicates that workers' alienation, job dissatisfaction, and high absenteeism are related to their feelings of external control (Truch, 1980). McIntyre (1982) found that special education teachers' perceived control over their lives decreased as their perceived burnout level (as measured by the MBI) increased. Kyriacou and Sutcliffe (1979b) also found that an external locus of control among teachers was associated with job-related stress. Indeed, "the stage is set for job-related stress when involvement in work is high, but feelings of control or power in the work setting are limited" (Sparks, 1979, p. 448). Teachers often feel responsible for situations that they are powerless to improve. Constant interruptions to their daily routine, for instance, may produce feelings of powerlessness among teachers (Dedrick & Dishner, 1982). The literature suggests, however, that teachers' lack of participation in decision making and the discipline problems created by misbehaving students are the greatest threats to teachers' needs for power, authority, and autonomy.

A major problem in many school systems is that "too often a few key administrators make decisions concerning such critical factors as curriculum priorities, grade organization, pupil-teacher ratios, staffing patterns, performance expectations, and evaluation procedures" (Iwanicki, 1983, p. 29). The lack of teachers' participation in decision making is a significant cause of teacher stress and burnout (Cedoline, 1982; Cunningham, 1983; Goodman, 1983; Iwanicki, 1983; Sparks & Hammond, 1981). Schambier (1981) argued that within the bureaucratic structure of schools top-down decision making based on Douglas MacGregor's Theory X (that human beings are lazy and will work only if they have to) is the direct cause of teacher burnout. Similarly, McNeely (1983) argued that teachers in schools which adhere to the rationalistic model of administration are more susceptible to burnout than those who work in schools which are based on the human relations model. Increasing teachers' participation in decision making, problem solving, goal setting, and program development is frequently cited as a means of alleviating the problem of teacher burnout (Cunningham, 1983; McNeely, 1983; Schambier, 1981).

Problems associated with the misbehaviour of students threaten the autonomy and control of teachers, and form a major group of sources of stress in the studies of Cichon and Koff (1980), Hudson and Meagher (1983), Kyriacou and Sutcliffe (1978b), Moracco et al. (1982), and Tellenback (1982). Many others, such as Bloch (1977, 1978), Bloland and Selby (1980), Coates and Thoresen (1976), Farber and Miller (1981), Goodman (1983), Pines et al. (1981), and Scrivens (1979), link students' misbehaviour, disrespect, and violence with teacher stress, burnout, or other negative responses to teaching. The problem of discipline and classroom control is compounded by the facts that parents often have unrealistic expectations of their children's ability and teachers have little control over peer group pressures (Swick & Hanley, 1980). Thus, although teachers can gain motivation and satisfaction from positive relationships with their students (Lortie, 1975; Farber, 1984), problems related to disciplining noisy, unruly, or violent students can lead to burnout.

Self-actualization needs. Teachers' need for self-actualization, that is, for a sense of personal development, fulfillment, and accomplishment, is often frustrated by the school system and the structure

of the teaching profession. The lack of promotional opportunities for teachers is a source of stress and burnout (Cichon & Koff, 1980; Farber, 1982; Garland, 1981; Kaiser, 1981; Kyriacou & Sutcliffe, 1978a, 1979a). Swick and Hanley (1980) remarked that

> being a classroom teacher prepares one to continue being a classroom teacher. In order to move upward, to be promoted and financially rewarded, one must obtain additional education . . . in different areas, such as administration or supervision. To remain in the classroom as a teacher means that the individual will not rise to a higher rank or be promoted. The most the teacher can expect to receive is an annual incremental salary. (p. 9)

Cunningham (1983) argued that

> teachers are not respected within the profession. Prestige, honor, and money all go to the person who seldom sees a child. Many competent career-minded teachers, aware that the main opportunity for making status gains in education rests in full-time administrative positions, choose to leave the classroom. (p. 42)

For those who do remain in the classroom, few possibilities for promotion exist (Lortie, 1975).

Opportunities for personal development, fulfillment, and accomplishment in teaching are further limited by work overload and time demands. Burnout is partly the result of teachers having too much paperwork, marking, testing, and other work, and too little time in which to do it (Coates & Thoresen, 1976; Farber, 1982; Kyriacou & Sutcliffe,

1978a; Moracco et al., 1982; Tellenback, 1982). Inadequate planning and preparation time, in particular, is closely associated with burnout (Cook & Leffingwell, 1982; Garland, 1981; Saunders & Watkins, 1982). Increasing class sizes and student-teacher ratios intensify the problem (Bloch, 1977; Cichon & Koff, 1980; Farber & Miller, 1981; Swick & Hanley, 1980; Weiskopf, 1980). Teachers' sense of having too much work, too many students, and too little time is further aggravated by role conflict.

Teachers interact with students, parents, administrators, and other teachers, and "are perpetually expected to be diplomats, mediators, counselors, disciplinarians, and imparters of knowledge" (Swick & Hanley, 1980, p. 14). When these various roles conflict with one another, job satisfaction decreases (Tosi & Tosi, 1970) and burnout may result (Crane & Iwanicki, 1983; Horton, 1984; Syrotuik & D'Arcy, 1983). Role ambiguity, role overload, and other forms of role stress are also associated with burnout (Bailey, 1983; Cook & Leffingwell, 1982; Crane & Iwanicki, 1983; Gupta, 1981). Schwab and Iwanicki (1982a) found a significant relationship between perceived role conflict and role ambiguity, and teacher burnout (as measured by the MBI). Iwanicki (1983)

argued that

> role-related distress is becoming more of a problem as student enrollments decline [and] reduction-in-force decisions based primarily on seniority . . . result in placing teachers in positions they are certified to teach but neither have the desire nor current skills to teach. (p. 29)

Moreover, conflicts between the professional role of teachers and the various roles they play outside the school (as spouses, parents, etc.) may also cause burnout (Sparks & Hammond, 1981).

The lack of promotional opportunities in teaching, work overload, time pressures, and role conflicts may rob teachers of the opportunity for personal development, fulfillment, and accomplishment in their jobs, and thereby contribute to teacher burnout.

Personal and Predispositional Factors Associated with Burnout

Although job-related environmental stressors may be the immediate cause of teacher stress and burnout, individual differences among teachers account for variations in the perceived stress from the same environmental stressors (Truch, 1980).

Personality types. Research suggests that some personality types are more prone to stress than others. American cardiologists Friedman and Rosenman

(1974) identified the "Type A" stress-prone individual as one who

> is characterized by frenzied speed in moving, talking, and eating; hates lines or drinking slowly; schedules more activities than time is available for; loathes "wasting" time; becomes impatient with others' perceived slowness; has little if any time available for intimacy, relaxation, or enjoyment; and never seems to catch up. (p. 102)

"Type B" people, who value their leisure time, who are more creative, who do not have a frantic sense of urgency, who are more thoughtful and less abrasive, are better able to cope with stress, and are less likely to have heart attacks (Friedman & Rosenman, 1974). Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) found that neurotic, flexible, introverted, or status-oriented persons are more susceptible to stress in the work place than self-confident, extroverted, rigid, or security-oriented persons. Bloch (1977, 1978) identified idealism, passivity, and dedication as characteristics of the "battered teacher." Teachers who have unmet ego needs, low self-esteem, or a poor self-relationship feel more stress than those who do not (Fimian, 1982; Styles & Cavanaugh, 1977; Swick & Hanley, 1980). Those teachers who feel professionally or personally incompetent are more susceptible to stress and burnout than those who

feel competent (Coates & Thoresen, 1976; Fimian, 1982; Styles & Cavanaugh, 1977).

Demographic variables. Several demographic variables are also related to stress and burnout. Some evidence suggests that female teachers are more satisfied than male teachers (Chapman & Lowther, 1982; Lortie, 1975), and that male teachers are more burned out than female teachers (Rottier, Kelly, & Tomhave, 1983), especially as measured by the Depersonalization subscale on the MBI (McIntyre, 1982; Schwab & Iwanicki, 1982b); however, Borthwick, Thornell, and Wilkinson (1982) found that females perceive higher levels of burnout on the MBI. Younger teachers experience more intensity and frequency of burnout than older teachers (Borthwick et al., 1982; Farber, 1984; McIntyre, 1982; Schwab & Iwanicki, 1982b). Although Schwab and Iwanicki (1982b) and McIntyre (1982) found no correlation between level of burnout and years of teaching experience, Borthwick et al. found that teachers with fewer years of teaching experience are more burned out than experienced teachers. McIntyre found no correlation between level of burnout and grade level taught, but Farber, and Schwab and Iwanicki found that middle school, junior high,

and high school teachers exhibited higher levels of burnout than elementary school teachers. Similarly, Borthwick et al. found that secondary school teachers are more burned out than elementary school teachers. No empirical evidence exists to establish a correlation between the level of burnout and the marital status or level of education of teachers, or between the level of burnout and the size of school or type of community (i.e., rural, suburban, urban) in which they teach.

Stressful events or life changes. Stressful events or changes in teachers' lives can also produce physical and mental illness, and lower their resistance to job-related stressors:

> Teachers who are experiencing major life change events (e.g., death of a spouse, divorce, etc.), and those who accumulate numerous less traumatic changes, may find the burdens and responsibilities of their work more difficult to bear until they have had an opportunity to adapt to their new life styles. (Sparks & Hammond, 1981, p. 6)

Burnout may also be symptomatic of the "mid-life crisis," a predictable stage in adult development when teachers' commitment to their job exceeds their perceived satisfaction from work and life (Cardinell, 1981; Cedoline, 1982; Scrivens, 1979). The adult life cycle, as popularized by Levinson (1978) and Sheahy (1977), may shed light on the burnout

phenomenon (Griffin, 1983).

Motivation: Content Theories

Hoy and Miskel (1982) defined motivation as "the complex forces, drives, needs, tension states, or other mechanisms that start and maintain voluntary activity directed toward the achievement of personal goals" (p. 137). Of the "content" (or "substantive") theories of motivation, which attempt to describe what needs, rewards, or incentives motivate behaviour (as opposed to "process" or "mechanical" theories), need theories are frequently used to study the motivation of teachers and administrators (Hoy & Miskel, 1982; Sergiovanni & Carver, 1980).

The Porter/Maslow Need Hierarchy Model

Maslow's (1954) theory of human motivation, based on a hierarchy of physiological, safety and security, social, esteem, and self-actualization needs, was adapted by Porter (1961) to measure the discrepancy between the actual and the desired needs fulfillment of managers in industry. Porter's (1962) Need Satisfaction Questionnaire (NSQ) is a modification of Maslow's hierarchy, with autonomy needs inserted between esteem and self-actualization needs, and

with physiological needs deleted. Trusty and Sergiovanni (1966) modified Porter's NSQ to render it applicable to schools. This modified NSQ consists of 13 items arranged according to Porter's five need categories. Sergiovanni and Carver (1980) described these five categories:

> (a) security needs: teachers' perceived need for money, benefits, tenure, and role consolidation associated with their jobs.
> (b) affiliation needs: teachers' perceived need for acceptance, belonging, friendship, and school membership in both formal and informal work groups.
> (c) esteem needs: teachers' perceived need for self-respect, respect by others as a person and as a professional, competence, confidence, and recognition.
> (d) autonomy needs: teachers' perceived need for control, influence, participation, and authority.
> (e) self-actualization needs: teachers' perceived need for working at top potential, for giving all, and for attaining peak satisfaction, achievement, and personal and professional success. (p. 84)

Need deficiency in each area is determined by calculating the difference between teachers' perceptions of the actual level and their perceptions of the desired level of need fulfillment on the modified NSQ. Sergiovanni and Carver cited several studies which show that, though deficiency in the security needs of teachers has increased in the 1970s, teachers experience the greatest needs deficiency in the areas of esteem, autonomy, and self-actualization:

> Deficiencies perceived at the esteem and other higher levels suggest the personal attention [teachers] seek is that derived from the work itself (recognition for achievement, participating in decisions about work, responsibility for achieving outcomes, and challenging assignments) rather than its context (pleasant surroundings, nice administrators and supervisors, and close friends with whom to work). (p. 88)

Herzberg's Motivation-Hygiene Theory

Sergiovanni and Carver (1980) combined the Maslow/Porter need hierarchy model with another conceptually similar model--the motivation-hygiene theory of Herzberg and his colleagues--to attempt to explain which factors contribute to teachers' job dissatisfaction. Herzberg et al. speculated that factors contributing to job satisfaction form a separate set from those contributing to job dissatisfaction. Herzberg saw achievement, recognition, work itself, responsibility, and advancement as satisfiers or motivators; he saw salary, possibility of growth, status, supervision, policy and administration, working conditions, job security, personal life, and interpersonal relations with subordinates, superiors, and peers, as dissatisfiers or hygiene factors. Sergiovanni (1967) used the Herzberg model to study teachers' job satisfaction and dissatisfaction, and found that achievement and recognition are important

motivators for teachers, and work itself and advancement less important motivators than in Herzberg's study. Sergiovanni found, like Herzberg et al., that satisfiers and dissatisfiers are mutually exclusive factors. Sergiovanni stated that

> dissatisfaction for teachers seems to result from three clusters [of dissatisfiers]: (1) poor interpersonal relations; (2) incompetent, inadequate, or unfair administrative and supervisory practices; and (3) matters external to the school which compromise one's personal life. These factors have the potential to lower one's performance, but neutralizing them or improving them does not motivate teachers to perform in extraordinary ways. (Sergiovanni & Carver, 1980, p. 109)

Sergiovanni and Carver (1980, pp. 118-119) defined "motivation seekers" as those who, emphasizing the nature of the task, try to fulfill their higher-order needs for self-actualization, autonomy, and esteem on the job. They defined "hygiene seekers" as those who, emphasizing the nature of the environment, focus on the lower-order needs for esteem, affiliation, and security in an attempt to avoid dissatisfaction.

Although the motivation-hygiene theory research has been criticized for relying too much on critical-incidents interviews (Hoy & Miskel, 1982; Sergiovanni & Carver, 1980), it provides a useful construct for operationalizing Maslow's hierarchy of needs, that is,

for linking job-related factors with needs fulfillment.

Needs Deficiency, Job Dissatisfaction, and Teacher Burnout

Some literature on teacher stress and burnout draws on content theories of motivation, particularly Maslow's hierarchy of needs and Herzberg's motivation-hygiene theory, and links teachers' needs deficiency and job dissatisfaction with teacher burnout.

Motivation and Burnout

Farber and Miller (1981) listed several overt sources of stress, including overcrowded classrooms, involuntary transfers, excessive paperwork, excessive testing, inadequate salaries, demanding or unsupportive parents, lack of administrative support, public criticism of teachers, and students' apathy, violence, and abusiveness. They hypothesized, however, that burnout is attributable to the single fact that "teachers' needs for affiliation and support are often unfulfilled" (p. 239). Schools are not adequately structured to meet teachers' needs. Schools, in short, do not sufficiently motivate teachers, and burnout is the result.

Cunningham (1983) argued that the school structure

is not conducive to the fulfillment of teachers' higher-level needs. He felt that teacher burnout can only be alleviated by improving the structure of the school and the teaching profession to permit teachers to fulfill their needs for self-actualization and esteem:

> Teachers must be provided an opportunity for increased interaction, support, and promotion through a hierarchy of positions [with] structural provisions for them to assume responsibilities, initiative, authority, and salary commensurate with their interests, talents, and abilities. . . . Teachers must have the authority and power to change undesirable conditions in their job environment. . . . Teachers need to have daily contacts and assistance from supervisors who can aid in their professional growth, simplify their work, provide instructional materials and support, recommend time-savers, cover classes, and help them to improve their performance. . . . The entire school environment must be changed to provide for joint problem solving, professional trust, and greater freedom in meeting unique student needs. (pp. 43-47)

Using Maslow's hierarchy, Kaiser (1981) claimed that current threats to the safety and security needs of teachers have prevented them from seeking to satisfy third (belongingness, social, love), fourth (ego), and fifth (self-fulfillment, self-actualization) level needs. He argued that the burnout and dropout rates for teachers increase when they do not seek to satisfy their higher-level needs. Employing Herzberg's distinction between

hygiene and motivation factors to describe the job-related factors associated with teacher motivation, Kaiser stated that the motivators do not exist for teachers. School boards and administrators usually provide few promotional opportunities, little recognition of achievement, and insufficient job enrichment. Kaiser insisted that

> burnout cannot be prevented by increasing the hygiene factors. . . . Boards of education must work with teachers' organizations to increase the motivational factors of enriched job responsibility, a chance for advancement, recognition for excellence in performance and an increased sense of achievement. (p. 43)

Kaiser (1982, p. 18) schematized the relationship between motivation and burnout in terms of Maslow's hierarchy of human needs and Herzberg's motivation-hygiene theory. Refer to Figure 1.

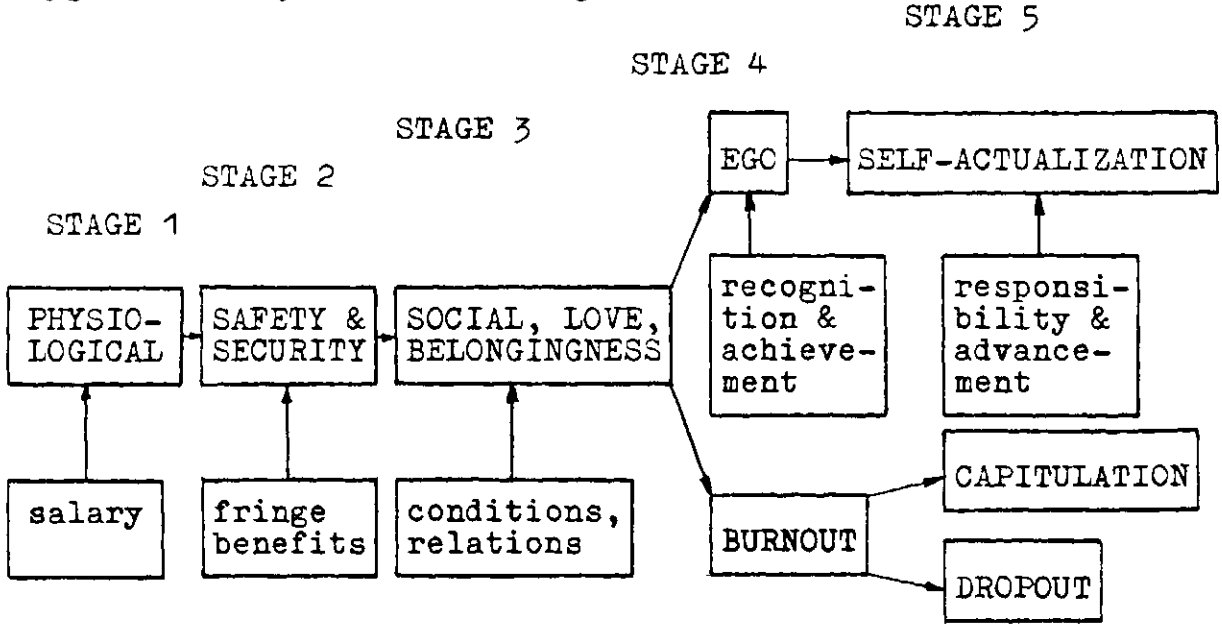

Figure 1. Kaiser's schematization of the relationship between motivation and burnout.

Griffin (1983) dealt with teacher motivation and burnout in terms of four general needs teachers experience: the desire to teach students, the desire for economic and employment security, the need for teachers themselves to learn and to be stimulated, and the desire for power and for feeling valuable and important. Griffin did not view these needs in a sequential or hierarchical way: All four motivational needs must be met before burnout can be alleviated.

Flint's (1982) theoretical model for understanding burnout is based on the assumption that stress and job dissatisfaction interact to produce burnout: "Burnout occurs when stress levels become unmanagably [sic] high and, simultaneously, job dissatisfaction becomes intolerably low and this situation continues for a significant period of time" (p. 7).

Blase (1982) explained the link between motivation and burnout by means of his Teacher Performance-Motivation Theory, which focuses on teacher-student relationships. He represented the burnout cycle as "a set of conditions in which teacher effort . . . and teacher coping resources . . . fail to overcome job-related stressors" (p. 99). In Blase's model, burnout is primarily the consequence

of ineffective performance with students: Low levels of teacher motivation are associated with low levels of effectiveness, satisfaction, involvement, and effort, and with high levels of teacher burnout.

Farber and Miller (1981), Cunningham (1983), Kaiser (1981, 1982), Griffin (1983), Flint (1982), and Blase (1982) assumed that the motivation, job satisfaction, and needs fulfillment of teachers relate inversely to burnout; however, empirical data that prove this are scant.

Empirical Studies of Teachers' Needs Deficiency, Job Dissatisfaction, and Burnout

Several studies examined teacher stress as it relates to job satisfaction. Forty-six percent of the 44 teachers who responded to Sparks' (1979) questionnaire were dissatisfied with their jobs; 46 percent indicated that, given a second chance, they would not choose teaching as a career again; 70 percent indicated that they felt physically or emotionally exhausted by the end of the school day. Sparks discovered that teachers' feelings of powerlessness, their perceived role conflicts, and their poor relationships with administrators were the work-related stressors which caused the

most dissatisfaction.

Kyriacou and Sutcliffe (1979a) examined job satisfaction, absenteeism, and teachers' (N=218) intention to leave teaching in relation to self-reported teacher stress and 14 sources of stress. They found

> not only that the experience of teacher stress leads to the experience of lower job satisfaction, absenteeism,and intention to leave teaching, but also that the circumstances that lead to the experience of teacher stress also lead to lower job satisfaction, absenteeism and intention to leave teaching directly. (p. 95)

They conceptualized job satisfaction, absenteeism, and intention to leave teaching as correlates rather than as symptoms of stress.

Other studies examined teachers' job satisfaction in relation to the fulfillment of their higher-level needs. Sweeney (1981) searched for causes of teacher burnout by examining teachers' perceived needs deficiency in relation to the age and sex of teachers and the ability level of their students. He found that young teachers (aged 25 to 34) and teachers with low ability students experienced more job dissatisfaction and greater needs deficiency than other teachers. He concluded that secondary school teachers' higher-level esteem and self-actualization needs were not being met, and that perceived needs deficiency was

greater in 1980 than in 1970, especially for security (+.55), esteem (+.25), and self-actualization (+.21) needs (p. 204).

Frataccia and Hennington (1982) examined the extent to which the hygiene and motivation needs of 37 teachers who had resigned from teaching were met. They found statistically significant differences between important needs and the extent to which they were being met for all hygiene factors and for three of five motivation factors (recognition, achievement, and advancement). Frataccia and Hennington remarked:

> The growing incidence of teacher burnout and the less dramatic incidence of teachers leaving teaching to pursue alternate careers may relate to the notion that teachers view teaching as a situation in which their needs to avoid unpleasantness and for psychological growth are difficult to satisfy. (p. 6)

Kreis (1983) assumed that "the problem of teacher burnout is rooted in that of job satisfaction" (p. 3). Kreis examined the relationship between job satisfaction and needs fulfillment among urban high school teachers in the north-eastern states. He found that those teachers whose self-actualization, autonomy, self-esteem, affiliation, and security needs were met by their job were satisfied with it. Conversely, those teachers whose needs were not met were dissatisfied with their jobs. Teachers whose

lower-level needs were met but whose higher-level needs were not met by their job were neither satisfied nor dissatisfied with their job.

Anderson's and Iwanicki's (1984) study was the only one that focused specifically on the relationship between needs deficiency and burnout. They found that needs fulfillment was tied empirically to burnout. They correlated scores on the PNSQ with scores on the MBI and found that teachers (N=375) who were experiencing more intensity and frequency of burnout than other teachers also reported greater needs deficiency in the areas of esteem and self-actualization.

Theoretical Construct and Hypotheses

This study attempted to link the theory and research on teacher motivation and human needs with the theory and research on the job-related factors associated with teacher burnout. It predicted that certain job-related factors combine to threaten English teachers' needs for fulfillment in each of five need categories: self-actualization, autonomy, esteem, affiliation, and security. Job-related factors such as role conflict and role ambiguity, work overload and time demands, and the lack of promotional opportunities

in teaching likely frustrate teachers' attempts to fulfill their need for self-actualization through their job. Other job-related factors such as student discipline problems and the lack of participation in decision making might threaten teachers' need for autonomy. Others, particularly the low status of the teaching profession, the lack of administrative and parental support, and the public criticism of teachers and education, perhaps impinge upon teachers' need for esteem. Staff conflict and isolation in the classroom might threaten teachers' need for affiliation. Involuntary transfer and staff reduction likely threaten teachers' need for security. Teacher burnout, defined as the perceived emotional exhaustion, depersonalization, and decreased personal accomplishment of teachers, is the result of the needs deficiency engendered by these job-related factors. Refer to Figure 2.

Based on the theory and research on human needs, teacher motivation, and the job-related factors associated with teacher burnout, this study developed 23 hypotheses:

(1) Hypothesis 1: The perceived level of Emotional Exhaustion of English teachers increases with the amount of burnout they attribute to the job-related factors.

(2) Hypothesis 2: The perceived level of Depersonalization of English teachers increases with the amount of burnout they attribute to the job-related factors.

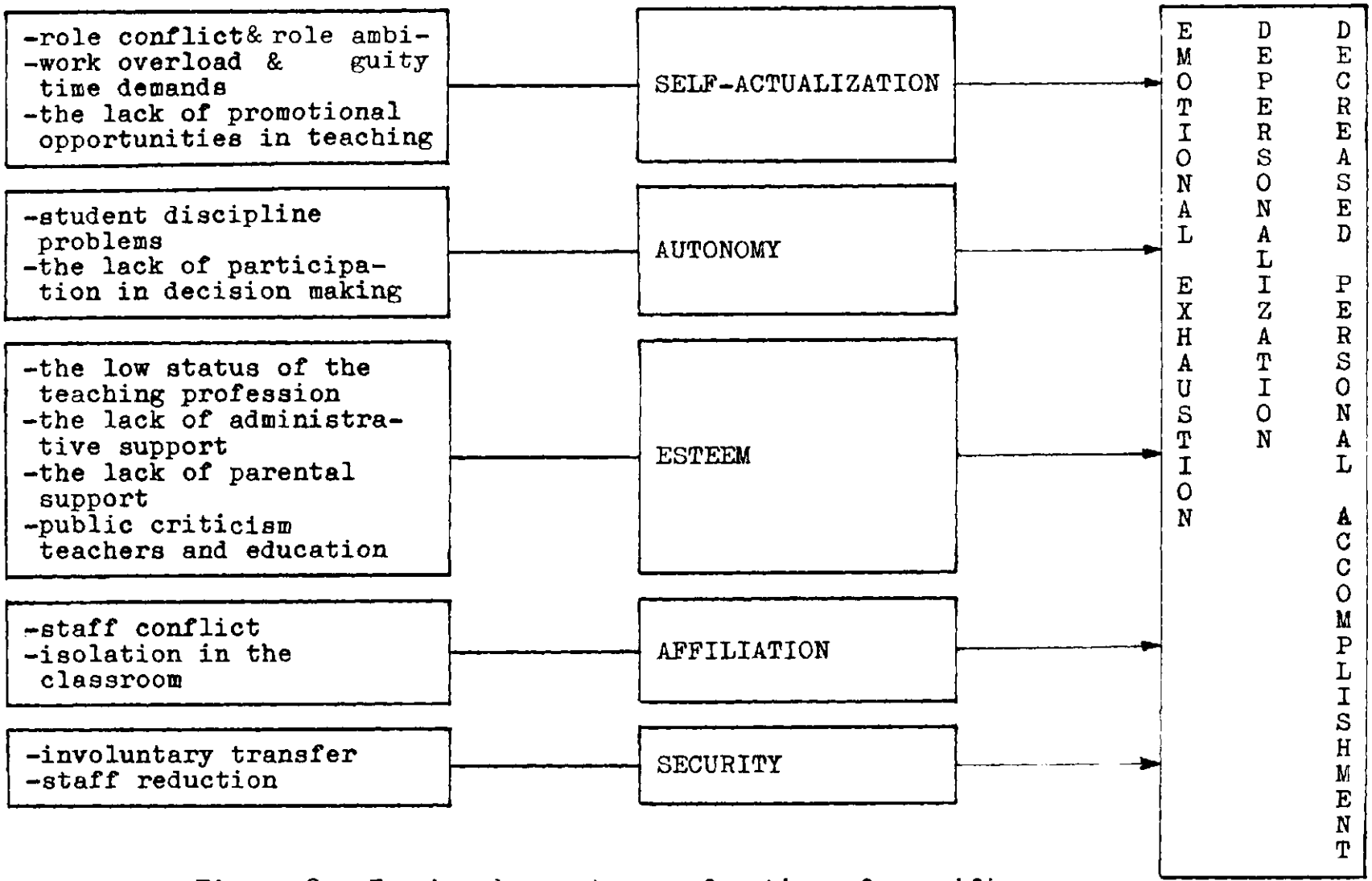

Figure 2. Teacher burnout as a function of specific job-related factors and teachers' needs deficiency.

(3) Hypothesis 3: The perceived level of Personal Accomplishment of English teachers decreases with the amount of burnout they attribute to the job-related factors.

(4) Hypothesis 4: The perceived level of need deficiency in the area of Security of English teachers increases with the amount of burnout they attribute to the job-related factors.

(5) Hypothesis 5: The perceived level of need deficiency in the area of Affiliation of English teachers increases with the amount of burnout they attribute to the job-related factors.

(6) Hypothesis 6: The perceived level of need deficiency in the area of Esteem of English teachers increases with the amount of burnout they attribute to the job-related factors.

(7) Hypothesis 7: The perceived level of need deficiency in the area of Autonomy of English teachers increases with the amount of burnout they attribute to the job-related factors.

(8) Hypothesis 8: The perceived level of need deficiency in the area of Self-actualization of English teachers increases with the amount of burnout they attribute to the job-related factors.

(9) Hypothesis 9: The perceived level of Emotional Exhaustion of English teachers increases with their

perceived level of need deficiency in the area of Security.

(10) Hypothesis 10: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Affiliation.

(11) Hypothesis 11: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Esteem.

(12) Hypothesis 12: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Autonomy.

(13) Hypothesis 13: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Self-actualization.

(14) Hypothesis 14: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Security.

(15) Hypothesis 15: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Affiliation.

(16) Hypothesis 16: The perceived level of Depersonalization of English teachers increases with

their perceived level of need deficiency in the area of Esteem.

(17) Hypothesis 17: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Autonomy.

(18) Hypothesis 18: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Self-actualization.

(19) Hypothesis 19: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Security increases.

(20) Hypothesis 20: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Affiliation increases.

(21) Hypothesis 21: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Esteem increases.

(22) Hypothesis 22: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Autonomy increases.

(23) Hypothesis 23: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Self-actualization increases.

In addition, this study also examined the levels of teacher burnout and needs deficiency, and the 13 job-related factors, in relation to 13 background variables--age, sex, marital status, years of teaching experience, level of education, grade level taught, type of school, size of school, average class size, type of community, percentage of teaching time in the area of English, field of specialization, and membership in the Saskatchewan English Teachers' Association. Because the theory and research on the demographic variables associated with teacher burnout were slight, no hypotheses were formulated for this part of the study.

Summary

Chapter II examined definitions of stress and burnout, and reviewed the literature on the personal and job-related factors associated with teacher burnout. It also summarized the needs hierarchy model of Maslow (1954) and Porter (1961, 1962), and the motivation-hygiene theory of Herzberg and

his associates (1959). This chapter examined the theoretical articles and empirical studies which link needs deficiency, job dissatisfaction, and teacher burnout. From the literature, a theoretical framework for examining the relationship between English teachers' perceived level of burnout and their perceived needs deficiency, and the job-related factors associated with these two constructs, was developed. The chapter concluded with 23 hypotheses.

Chapter III

The Research Methodology

This chapter describes the instruments, the population and the sample, the method of data collection, and the method of data analysis used in this study.

Instrumentation

The data for this study were obtained from teachers' answers to a four-part Teacher Burnout and Needs Deficiency Questionnaire. Part I of the questionnaire gathered background information. Part II gathered information on the levels of burnout of English teachers; it consisted of the Maslach Burnout Inventory (MBI). Information on English teachers' perceived needs deficiency was obtained from the Porter Need Satisfaction Questionnaire (PNSQ) in Part III of the Teacher Burnout and Needs Deficiency Questionnaire. Part IV of the questionnaire gathered information on how much burnout English teachers attributed to several job-related factors.

Background Variables and Job-Related Factors Associated with Burnout

The Teacher Burnout and Needs Deficiency Questionnaire gathered the following background information about the

English teachers surveyed: age, sex, marital status, years of teaching experience, level of education, grade level taught, size of school, average class size, type of community, percentage of teaching time in the area of English, field of specialization, and membership in the Saskatchewan English Teachers' Association (SETA). The questionnaire also gathered data on how much burnout English teachers attributed to 13 job-related factors: staff reduction, involuntary transfer, isolation in the classroom, staff conflict, the public criticism of teachers and education, the lack of parental support, the lack of administrative support, the low status of the teaching profession, the lack of participation in decision making, student discipline problems, the lack of promotional opportunities in teaching, work overload and time demands, and role conflict and role ambiguity. For each job-related factor, English teachers were asked whether they attributed a very small, small, moderately small, moderate, moderately high, high, or very high amount of burnout in their present position to that factor.

The Maslach Burnout Inventory (MBI)

The Teacher Burnout and Needs Deficiency Questionnaire used the MBI to measure not merely whether or not teachers were burned out but what levels of burnout they perceived. The MBI consists of 22 items arranged according to 3 subscales: Emotional

Exhaustion, Depersonalization, and Personal Accomplishment. The items were rated for frequency on a scale from 1 ("never") to 7 ("every day"). A mean score for each subscale was derived by totalling the scores of all the items of each subscale, and dividing by the number of items. Although the 22 items of the MBI were designed to be rated both for frequency and intensity, Iwanicki and Schwab (1981) found that the average total variance in common between the frequency and intensity scores for teachers was 76%. They questioned whether the two dimensional format was necessary when the MBI was used with teachers.

The Porter Need Satisfaction Questionnaire (PNSQ)

The Teacher Burnout and Needs Deficiency Questionnaire used the PNSQ developed by Porter (1961) from Maslow's hierarchy of needs and adapted by Trusty and Sergiovanni (1966) for use in schools. The PNSQ consists of 13 items arranged according to five need categories: security, affiliation, esteem, autonomy, and self-actualization. For each of the 13 items, teachers indicated

(a) how much of the characteristic was presently connected with their school position, and

(b) how much of the characteristic they thought should be connected with their school position.

Teachers responded by choosing a number from 1 (representing very low amounts) to 7 (representing very high amounts). The degree of perceived needs deficiency was determined by subtracting the scores of (a) from the scores of (b).

Validity and Reliability of the Instruments

As Anderson and Iwanicki (1984) reported, the test-retest reliability of the PNSQ has been verified (.83) by Dore and Meacham (1973). Also, Weber and Hadd (1974) measured the validity of the PNSQ and found that it measured 5 categories of need satisfaction consistent with Porter's 5 areas.

The MBI was developed, tested, and validated by Maslach and Jackson (1981). They found reliability coefficients of 0.89 (frequency) and 0.86 (intensity) for the subscale Emotional Exhaustion, 0.77 (frequency) and 0.72 (intensity) for Depersonalization, and 0.74 (frequency) and 0.74 (intensity) for Personal Accomplishment. Maslach and Jackson found test-retest reliability coefficients of 0.82 (frequency) and 0.53 (intensity) for Emotional Exhaustion, 0.60 (frequency) and 0.69 (intensity) for Depersonalization, and 0.80 (frequency) and 0.68 (intensity) for Personal Accomplishment. Convergent validity was demonstrated by correlating individuals' MBI scores with behavioural

ratings made by the individuals' spouses or co-workers, by correlating MBI scores with the presence of job-related factors associated with burnout, and by correlating MBI scores with other outcomes linked with burnout (such as a desire to leave one's job, difficulties with family and friends, insomnia, and a desire to spend less time with people). Discriminant validity of the MBI was obtained by comparing individuals' scores on the MBI to scores on scales which measure other psychological constructs, such as job satisfaction and social desirability. The MBI subscales were not significantly correlated with either the JDS measure of general job satisfaction or the Crowne-Marlowe Social Desirability Scale. The MBI was adapted, tested, and validated for use with teachers by Iwanicki and Schwab (1981). It has proved to be an effective means of measuring the level of teacher burnout for many research studies (Anderson & Iwanicki, 1984; Beasley, 1984; Beasley et al., 1983; Borthwick et al., 1982; Crane & Iwanicki, 1984; McIntyre, 1982; Presley, 1982; Schwab & Iwanicki, 1982a, 1982b; Zabel & Zabel, 1981). Using the MBI to measure teacher burnout allows one to draw comparisons with these other studies.

The Population and Sample

The population for this study consisted of the

949 teachers in Saskatchewan who taught English for 30% or more of the teaching day. Two hundred and fifty of these teachers were randomly sampled. This sample size was large enough to represent sufficiently the population (cf. Kerlinger, 1979).

Collection of the Data

The questionnaires, sent to English teachers in April, 1985, were returned by mail in pre-stamped envelopes. Follow-up letters were sent to teachers who did not respond within ten days. Teachers were assured that their anonymity would be respected.

Analysis of the Data

Oneway analyses of variance were used to examine the relationships between the levels of burnout and the levels of needs deficiency; between the levels of burnout and needs deficiency, and the job-related variables; and between the levels of burnout and needs deficiency, as well as the job-related factors, and the background variables. For each of these relationships, the null hypothesis was tested at the .05 and .01 levels of significance.

Stepwise multiple regression analyses were used to gain a complete picture of the relationship of the needs deficiency and job-related variables to

the three burnout subscales when the background variables were controlled. The subscales of the MBI were the dependent variables in the regression analyses. The background variables were entered into the regression equations at the first step. The independent (predictor) job-related and needs deficiency variables entered the analyses at subsequent steps. The analyses revealed the amount of variance in burnout attributable to the job-related and needs deficiency variables after the variance produced by the background variables had been controlled.

Summary

Chapter III described the instruments and their validity and reliability, the population and the sample, the method of data collection, and the method of data analysis used in this study.

Chapter IV

Analysis of the Data

Introduction

The purposes of this study were:

(1) to examine the relationship between the levels of burnout and the levels of needs deficiency of English teachers in Saskatchewan;

(2) to examine the levels of burnout and needs deficiency of English teachers in relation to 13 job-related factors associated with burnout;

(3) to examine the levels of burnout and needs deficiency, and the job-related factors, in relation to 13 background variables.

In early May, 1985, a four-part Teacher Burnout and Needs Deficiency Questionnaire was sent to 250 English teachers randomly selected from the 949 teachers in Saskatchewan who taught English for 30% or more of the school day. A list of all English teachers in Saskatchewan had been obtained from the Department of Education. The responses to the questionnaire formed the data for this study. The data were recorded on optical scanning sheets and entered into a computer. In this chapter, the data are analyzed.

Response Frequencies

Frequencies of the Background Variables

Part I of the Teacher Burnout and Needs Deficiency Questionnaire gathered background information on the respondents.

Distribution of the respondents by the date of return. Of the 250 questionnaires sent, 181 (72.4%) were returned. One hundred and thirty-three questionnaires (73.5% of the total return) were returned during the first week (May 6 - 10); 29 questionnaires (16.0%) were returned during the second week (May 13 - 17); 6 questionnaires (3.3%) were returned during the third week (May 20 - 24); 7 questionnaires were returned during the fourth week (May 27 - 31); 3 questionnaires (1.7%) were returned during the fifth week (June 3 - 7). Three questionnaires were returned after June 10th, and therefore could not be included in the data for this study.

Distribution of the respondents by age. Each respondent indicated his or her age by choosing one of seven categories: 20 - 24 years, 25 - 29, 30 - 34, 35 - 39, 40 - 44, 45 - 49, or 50 years and over. The frequencies are indicated in Table 1. Fifty-nine percent of the respondents were under the age of 40; 41% of them were in their 30s. Refer to Table 1.

Table 1

Distribution of Respondents by Age

Age in Years	Absolute Frequency	Relative Frequency
20 - 24	7	3.9%
25 - 29	25	14.0%
30 - 34	30	16.9%
35 - 39	43	24.2%
40 - 44	32	18.0%
45 - 49	14	7.9%
50 & over	27	15.2%
Total	178	100.0%

Distribution of respondents by sex. Of 177 valid cases, 82 respondents (46.3%) were male and 95 respondents (53.7%) were female.

Distribution of respondents by marital status. Respondents indicated whether they were single, married with children, married without children, or widowed, divorced, or separated. The frequencies are indicated in Table 2.

Distribution of respondents by their years of teaching experience. Respondents indicated their years of teaching experience by choosing one of seven categories: 0 - 4 years, 5 - 9 years, 10 - 14

Table 2

Distribution of Respondents by Marital Status

Category	Absolute Frequency	Adjusted Frequency
Single	37	20.9%
Married with children	107	60.5%
Married without children	23	13.0%
Widowed, divorced, or separated	10	5.6%
Missing cases	1	—
Total	178	100.0%

years, 15 - 19 years, 20 - 24 years, 25 - 29 years, or 30 years and over. The frequencies are indicated in Table 3. Whereas 42.9% of the respondents had 10 - 19 years of experience, only 11.8% of them had 25 years of experience or more. Refer to Table 3.

Distribution of respondents by their level of education. Respondents indicated their level of education by choosing one of five categories: No degree, one degree, two Bachelor degrees, P.G.D. (post-graduate diploma), or Masters and up. The frequencies are indicated in Table 4. The vast majority of respondents (84.7%) had either one or

Table 3

Distribution of Respondents by Years of Teaching Experience

Years of Experience	Absolute Frequency	Adjusted Frequency
0 - 4	27	15.3%
5 - 9	29	16.4%
10 - 14	43	24.3%
15 - 19	33	18.6%
20 - 24	24	13.6%
25 - 29	8	4.5%
30 & over	13	7.3%
Missing cases	1	—
Total	178	100.0%

two degrees.

Distribution of respondents by grade level taught. Respondents indicated the grade level they taught by choosing one of three categories: elementary, middle years/junior high, or high school. Because several respondents had checked both the last two categories, a fourth category--high school and junior high--was coded. Refer to Table 5 for the frequencies.

Table 4

Distribution of Respondents by Level of Education

Level of Education	Absolute Frequency	Adjusted Frequency
No degree	11	6.2%
One degree	93	52.5%
Two Bachelor degrees	57	32.2%
P.G.D.	5	2.8%
Masters & up	11	6.2%
Missing cases	1	—
Total	178	100.0%

Table 5

Distribution of Respondents by Grade Level Taught

Grade Level Taught	Absolute Frequency	Adjusted Frequency
Elementary	6	3.4%
Middle years/ Junior high	49	27.7%
High school	88	49.7%
High school & Junior high	34	19.2%
Missing cases	1	—
Total	178	100.0%

Distribution of respondents by type of school. Of 173 valid cases, 151 respondents (87.3%) taught in public schools, 19 respondents (11.0%) taught in separate schools, and 3 respondents (1.7%) taught in private schools.

Distribution of respondents by size of school. Respondents indicated the size of the school in which they taught by choosing one of four categories: less than 150 students, 151 - 300 students, 301 - 500 students, or over 500 students. All sizes of schools were represented by the respondents. Refer to Table 6.

Table 6

Distribution of Respondents by Size of School

Size of School by Number of Students	Absolute Frequency	Adjusted Frequency
Less than 150	30	16.9%
151 - 300	56	31.6%
301 - 500	40	22.6%
Over 500	51	28.8%
Missing cases	1	—
Total	178	100.0%

Distribution of respondents by type of community. Respondents indicated the type of community in which

they taught by choosing one of three categories: rural, urban, or suburban. Several respondents, however, were uncertain of the difference between the last two categories. For this reason, both urban and suburban communities were coded as urban. Of 178 valid cases, 91 respondents (51.1%) taught in rural communities and 87 respondents (48.9%) taught in urban communities.

Distribution of respondents by percentage of teaching time in the area of English. Of 176 valid cases, 88 respondents (50.0%) taught English for 76 - 100% of the school day, 41 respondents (23.3%) taught English for 51 - 75% of the school day, and 47 respondents (26.7%) taught English for 30 - 50% of the school day.

Distribution of respondents by area of specialization. Of 176 valid cases, 118 respondents (67.0%) were specialists in the field of English and 58 respondents (33.0%) were not.

Distribution of respondents by membership in SETA. Of 177 valid cases, 54 respondents (30.5%) were members of the Saskatchewan English Teachers Association and 123 respondents (69.5%) were not.

Frequencies of the Burnout Variables

Part II of the Teacher Burnout and Needs

Deficiency Questionnaire consisted of an adaptation of the Maslach Burnout Inventory (MBI), which measures the degree of emotional exhaustion, depersonalization, and personal accomplishment of respondents.

Frequency of the Emotional Exhaustion items. Nine items on Part II of the Teacher Burnout and Needs Deficiency Questionnaire combined to measure the first subscale of burnout, Emotional Exhaustion. Items 1 (I feel emotionally drained from my work), 2 (I feel used up at the end of the workday), 3 (I feel fatigued when I get up in the morning and have to face another day on the job), 6 (Working with people all day is really a strain for me), 8 (I feel burned out from my work), 13 (I feel frustrated by my job), 14 (I feel I'm working too hard on my job), 16 (Working directly with people puts too much stress on me), and 20 (I feel like I'm at the end of my rope) were rated for frequency on a seven-point Likert-type scale ranging from 0 (never) to 6 (every day). A single mean score on the subscale, Emotional Exhaustion, was computed for each respondent. An overall mean score for the item and sample was then calculated. Table 7 shows the adjusted frequencies, the total mean scores, and the standard deviations for each of the nine questionnaire items on the Emotional Exhaustion subscale.

Table 7

Adjusted Frequencies, Means, and Standard Deviations of Items on the Emotional Exhaustion Subscale

Frequency of Response	Response to Questionnaire Items (%)								
	1	2	3	6	8	13	14	16	20
Never	2.3	5.1	12.4	20.6	14.5	2.3	7.4	26.0	42.6
A few times a year	44.6	24.4	46.3	52.6	53.2	52.5	42.0	53.8	41.5
Monthly	5.1	5.7	6.2	4.0	7.5	11.9	9.7	5.2	2.8
A few times a month	29.4	29.5	24.9	15.4	13.9	16.9	18.2	9.2	9.1
Every week	8.5	8.5	4.5	1.7	2.3	3.4	8.0	0.6	0.0
A few times a week	9.0	20.5	4.5	2.9	7.5	10.2	7.4	2.9	2.8
Every day	1.1	6.3	1.1	2.9	1.2	2.8	7.4	2.3	1.1
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
*Mean	2.29	2.98	1.81	1.45	1.64	2.09	2.29	1.23	0.96
Standard Deviation	1.45	1.73	1.40	1.41	1.44	1.52	1.73	1.32	1.25

*Overall mean score = 1.86

The questionnaire item with the highest mean score was Item 2 (I feel used up at the end of the workday): 2.98. Twenty percent of English teachers felt used up at the end of the workday; 6.3% felt used up at the end of every workday. Item 14 (I feel I'm

working too hard on my job) and Item 1 (I feel emotionally drained from my work) had mean scores of 2.29. Ten percent of English teachers felt emotionally drained from their work at least a few times a week; 7.4% felt a few times a week that they were working too hard and another 7.4% felt every day that they were working too hard. Item 20, reflecting extreme emotional exhaustion (I feel like I'm at the end of my rope), had a mean score of less than 1.0. The mean of the mean scores for Emotional Exhaustion was 1.86. Although this represents a low to moderate level of emotional exhaustion, approximately 8 or 9% of the sample were definitely feeling burned out: 7.5% indicated that they felt burned out from their work a few times a week and another 1.2% reported that they felt burned out every day.

Frequency of the Depersonalization items. Five items on Part II of the Teacher Burnout and Needs Deficiency Questionnaire measured Depersonalization. Items 5 (I feel I treat some students as if they were impersonal "objects"), 10 (I've become more callous toward people since I took this job), 11 (I worry that this job is hardening me emotionally), 15 (I don't really care what happens to some students), and 22 (I feel students blame me for some of their problems) were rated for frequency on a seven-point

Likert-type scale ranging from 0 (never) to 6 (every day). A single mean score on the burnout subscale, Depersonalization, was computed for each respondent. Table 8 shows the adjusted frequencies, the total mean scores, and the standard deviations for each of the five questionnaire items on the Depersonalization subscale.

Table 8

Adjusted Frequencies, Means, and Standard Deviations of Items on the Depersonalization Subscale

Frequency of Response	Response to Questionnaire Items (%) 5	10	11	15	22
Never	33.9	36.2	45.5	54.5	19.1
A few times a year	39.1	38.5	36.9	34.7	50.3
Monthly	5.7	10.3	5.1	2.3	6.4
A few times a month	10.9	8.0	7.4	3.4	15.6
Every week	4.0	2.9	1.1	1.7	2.9
A few times a week	4.6	2.3	2.8	2.8	3.5
Every day	1.7	1.7	1.1	0.6	2.3
Total (%)	100.0	100.0	100.0	100.0	100.0
*Mean	1.33	1.27	0.95	0.74	1.53
Standard Deviation	1.51	1.35	1.28	1.18	1.42

*Overall mean score = 1.16

Item 22 (I feel students blame me for some of their problems) had the highest mean score: 1.53. Item 15 (I don't really care what happens to some students) had a low mean score: 0.74. The mean of the mean scores for the subscale Depersonalization (1.16) was lower than the mean of the mean scores for the subscale Emotional Exhaustion (1.86). While English teachers in Saskatchewan often "feel used up at the end of the workday," they still care about their students.

Frequency of the Personal Accomplishment items. Eight items on Part II of the Teacher Burnout and Needs Deficiency Questionnaire measured Personal Accomplishment. Whereas high degrees of burnout were reflected in high mean scores on the subscales of Emotional Exhaustion and Depersonalization, high degrees of burnout translated into low mean scores on the Personal Accomplishment subscale. Items 4 (I can easily understand how my students feel about things), 7 (I deal very effectively with the problems of my students), 9 (I feel I'm positively influencing people's lives through my work), 12 (I feel very energetic), 17 (I can easily create a relaxed atmosphere with my students), 18 (I feel exhilarated after working closely with my students), 19 (I have accomplished many worthwhile things in this job),

and 21 (In my work, I deal with emotional problems very calmly) were rated for frequency on a seven-point Likert-type scale ranging from 0 (never) to 6 (every day). A single mean score on the subscale, Personal Accomplishment, was computed for each respondent. Table 9 shows the adjusted frequencies, the total mean scores, and the standard deviations for each item on the Personal Accomplishment subscale.

Both Item 4 (I can easily understand how my students feel about things) and Item 17 (I can easily create a relaxed atmosphere with my students) had mean scores above 5.0. Item 19 (I have accomplished many worthwhile things in this job) had the lowest mean score, suggesting that English teachers' sense of personal accomplishment is lower than their sense of accomplishment with students. Refer to Table 9. The mean of the mean scores for the subscale was 4.53, which represents a moderate level of Personal Accomplishment.

Frequencies of Teachers' Current Levels of Needs Fulfillment

Part III of the Teacher Burnout and Needs Deficiency Questionnaire was a modified verson of the Porter Need Satisfaction Questionnaire (PNSQ). The PNSQ measures teachers' actual level of need

Table 9

Adjusted Frequencies, Means, and Standard Deviations of Items on the Personal Accomplishment Subscale

Frequency of Response	Response to Questionnaire Items (%) 4	7	9	12	17	18	19	21
Never	0.6	0.0	1.1	1.7	0.0	0.6	0.6	1.2
A few times a year	2.4	2.3	7.5	3.4	0.6	4.6	9.2	7.7
Monthly	1.2	2.9	4.0	2.3	2.3	2.9	4.0	6.5
A few times a month	7.1	15.7	13.8	18.9	4.0	16.0	16.2	16.1
Every week	14.3	20.3	13.8	18.3	9.2	21.1	24.3	17.3
A few times a week	26.8	26.2	22.4	40.0	29.9	38.3	31.2	23.8
Every day	47.6	32.6	37.4	15.4	54.0	16.6	14.5	27.4
Total (%)	100	100	100	100	100	100	100	100
*Mean	5.03	4.63	4.48	4.30	5.28	4.34	4.06	4.21
Standard Deviation	1.25	1.29	1.63	1.34	1.01	1.31	1.47	1.62

*Overall mean score = 4.53

fulfillment and their desired level of need fulfillment in five need areas: security, affiliation (social), esteem, autonomy, and self-actualization. Responses range from 1 (very low) to 7 (very high). The difference between the desired level of need fulfillment and the actual level in each need area is the need

deficiency. The greater the deficiency in a need area, the greater the degree of unfulfilled need.

Part (a) of each item on Part III of the Teacher Burnout and Needs Deficiency Questionnaire measured teachers' current level of needs fulfillment. Item 6(a) (The feeling of security in my school position is now . . .) measured teachers' current level of fulfillment of the need for security. Items 10(a) (The opportunity, in my school position, to give help to other people is now . . .) and 13(a) (The opportunity to develop close friendships in my school position is now . . .) measured teachers' current level of fulfillment of the need for affiliation. Items 1(a) (The feeling of self-esteem a person gets from being in my school position is now . . .), 4(a) (The prestige of my school position within the school is now . . .), and 8(a) (The prestige of my school position outside of the school is now . . .) measured teachers' current level of fulfillment of the need for esteem. Items 2(a) (The authority connected with my school position is now . . .), 5(a) (The opportunity for independent thought and action in my school position is now . . .), 11(a) (The opportunity, in my school position, for participation in the setting of goals is now . . .), and 12(a) (The opportunity, in my school position, for participation in the

determination of methods and procedures is now . . .) measured teachers' current level of fulfillment of the need for autonomy. Items 3(a) (The opportunity for personal growth and development in my school position is now . . .), 7(a) (The feeling of self-fulfillment a person gets from being in my school position is now . . .), and 9(a) (The feeling of worthwhile accomplishment in my school position is now . . .) measured teachers' current level of fulfillment of the need for self-actualization. Table 10 shows the adjusted frequencies, means, and standard deviations of English teachers' current level of need fulfillment for each questionnaire item.

Item 3(a) (The opportunity for personal growth and development in my school position is now . . .) had the lowest mean score, suggesting that English teachers' current level of fulfillment was lowest in the area of self-actualization. Item 10(a) (The opportunity, in my school position, to give help to other people is now . . .) had the highest mean score and Item 6(a) (The feeling of security in my school position is now . . .) had the second highest mean score, which suggested that English teachers' sense of fulfillment in the lower-level need areas of security and affiliation was relatively greater than in the higher-level need areas. Total mean

Table 10

Adjusted Frequencies, Means, and Standard Deviations of English Teachers' Current Level of Needs Fulfillment

Category of Response	Percentage Response to Questionnaire Items												
	6(a)	10(a)	13(a)	1(a)	4(a)	8(a)	2(a)	5(a)	11(a)	12(a)	3(a)	7(a)	9(a)
Very low	4.5	0.6	6.2	6.2	6.9	5.7	9.1	4.5	7.9	7.9	9.7	4.0	2.8
Low	5.1	2.2	7.3	5.6	6.3	9.1	7.4	5.1	6.2	7.3	10.8	7.3	7.3
Moderately low	4.5	5.1	5.1	8.5	8.6	10.8	12.5	10.1	11.8	9.6	12.5	12.4	11.9
Moderate	15.2	17.4	19.2	31.1	25.1	26.1	27.8	18.0	21.3	19.1	23.3	22.6	20.3
Moderately high	16.3	19.1	14.7	19.8	24.0	25.6	20.5	18.5	18.0	15.2	17.6	21.5	23.7
High	21.3	28.7	21.5	18.1	20.0	15.3	14.2	26.4	20.8	23.0	15.3	19.8	23.7
Very high	33.1	27.0	26.0	10.7	9.1	7.4	8.5	17.4	14.0	18.0	10.8	12.4	10.2
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	5.30	5.46	4.97	4.50	4.50	4.32	4.20	4.90	4.54	4.67	4.18	4.59	4.67
Standard Deviation	1.72	1.35	1.82	1.59	1.61	1.56	1.66	1.65	1.75	1.83	1.78	1.60	1.53

scores for each need area were as follows: Security (5.30), Affiliation (5.22), Esteem (4.44), Autonomy (4.58), and Self-actualization (4.48). These mean scores indicated that English teachers' current levels of needs fulfillment were lowest in the areas of Esteem and Self-actualization.

Frequencies of Job-Related Factors

Part IV of the Teacher Burnout and Needs Deficiency Questionnaire measured the amount of burnout English teachers attributed to various job-related factors. In the conceptual framework for this study, these factors were grouped according to how they might threaten English teachers' needs fulfillment. Items 10 (Staff reduction) and 5 (Involuntary transfer) were considered to be a threat to teachers' fulfillment of security needs. Items 9 (Isolation in the classroom) and 4 (Staff conflict) would seem to threaten teachers' need for affiliation. Items 13 (Public criticism of teachers and education), 12 (The lack of parental support), 8 (The lack of administrative support), and 3 (The low status of the teaching profession) might constitute a threat to teachers' need for fulfillment of esteem needs. Items 7 (The lack of participation in decision making) and 2 (Student

discipline problems) might threaten teachers' need for autonomy. Items 11 (The lack of promotional opportunities in teaching), 6 (Work overload and time demands), and 1 (Role conflict and role ambiguity) would seem to threaten teachers' need for self-actualization. Each item was rated on a Likert-type scale from 1 (very small amount) to 7 (very high amount). Because some respondents indicated that some factors did not contribute at all to burnout, an eighth category, "nil," was added, and coded "0." Table 11 shows the adjusted frequencies, the means, and the standard deviations for all job-related factors.

Item 6 (Work overload and time demands) had the highest mean score (4.44): 35.8% of English teachers attributed high or very high amounts of burnout to this factor. Item 5 (Involuntary transfer) had the lowest mean score (2.00). Refer to Table 11.

Oneway Analyses of Variance with Independent Background Variables

One of the purposes of this study was to examine the levels of burnout and needs deficiency, and 13 job-related factors, in relation to 13 background variables. Oneway analyses of variance were therefore run against each of three dependent burnout variables, each of five dependent needs deficiency variables,

Adjusted Frequencies, Means, and Standard Deviations for the Job-Related Factors Associated with Burnout

Category of Response	Percentage Response to Questionnaire Items												
	10	5	9	4	13	12	8	3	7	2	11	6	1
Nil	0.6	2.4	0.6	0.0	0.0	0.0	0.6	0.6	0.0	0.0	0.0	0.0	0.0
Very small amount	28.2	64.2	49.4	37.6	15.9	14.6	34.1	26.3	23.4	24.0	36.5	7.6	30.8
Small amount	16.5	9.7	17.6	21.2	16.5	21.1	18.8	15.2	21.6	22.2	14.1	10.0	16.6
Moderately small amount	11.8	3.6	7.6	11.8	16.5	13.5	8.2	14.6	11.1	11.1	7.6	14.7	10.1
Moderate amount	15.9	9.1	15.3	12.9	15.3	17.0	9.4	23.4	19.9	15.8	17.1	20.0	27.8
Moderately high amount	10.0	3.0	2.9	5.3	13.5	11.7	8.8	7.6	11.1	11.7	5.9	11.8	4.1
High amount	5.3	1.2	1.8	5.9	7.6	14.6	8.2	7.0	7.0	10.5	9.4	17.6	8.3
Very high amount	11.8	6.7	4.7	5.3	14.7	7.6	11.8	5.3	5.8	4.7	9.4	18.2	2.4
Total (%)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Mean	3.24	2.00	2.27	2.66	3.76	3.64	3.10	3.11	3.18	3.19	3.08	4.44	2.92
Standard dev.	2.06	1.82	1.66	1.83	2.00	1.89	2.17	1.81	1.83	1.87	2.09	1.88	1.73

and each of thirteen dependent job-related variables, using the thirteen background variables from Part I of the Teacher Burnout and Needs Deficiency Questionnaire as independent variables.

Oneway Analyses of Variance with the Dependent Burnout Variables and the Independent Background Variables

The frequency of each of three burnout subscales--Emotional Exhaustion, Depersonalization, and Personal Accomplishment--were used as the dependent variables in 14 separate oneway analyses of variance with the background variables and the date of return of questionnaires as the independent variables.

Significant oneway analyses of variance with the dependent variable Emotional Exhaustion and the independent background variables. Oneway analyses of variance of Emotional Exhaustion by Age and Emotional Exhaustion by Years of Teaching Experience produced significant F-ratios of 2.18 ($F(6) = 2.18$; $p < .05$) and 2.95 ($F(6) = 2.95$; $p < .01$) respectively. The oneway analysis of variance of Emotional Exhaustion by Age revealed that English teachers in the age category 40 - 44 years (n=31) experienced considerably higher levels of emotional exhaustion than other English teachers. The mean score for the 40 - 44

age category was 2.40, significantly different from the 30 - 34 age category (n=30; mean score: 1.57) and from the 35 - 39 age category (n=41; mean score: 1.60) at the .01 level of significance, as indicated by the LSD multiple range test. The 45 - 49 age category (n=14) exhibited the second highest mean score on the Emotional Exhaustion subscale (2.06). Thus, the results suggested that English teachers in their forties were more prone to emotional exhaustion than either younger or older teachers. This finding was different from the findings of Borthwick et al. (1982), Farber (1984), McIntyre (1982), Schwab and Iwanicki (1982b), and Anderson and Iwanicki (1984), all of whom found that young teachers experienced a higher frequency of burnout than older teachers. The finding of this study, however, seemed to suggest the notion that burnout is a product, in part, of the "mid-life crisis" (cf. Cardinell, 1981; Cedoline, 1982; Scrivens, 1979). In this study, teachers in their early twenties (n=7; mean score: 1.84) and late twenties (n=23; mean score: 1.93) experienced lower levels of emotional exhaustion than English teachers in their forties; however, young teachers experienced higher levels of emotional exhaustion than English teachers in their thirties, and slightly higher levels than English teachers 50 years and

older (n=24; mean score: 1.76).

Because the background variables Age and Years of Teaching Experience correlated highly with one another ($r = 0.87$), it is not surprising that the oneway analysis of variance of Emotional Exhaustion by Years of Teaching Experience also produced a significant F-ratio ($F(6) = 2.94$; $p < .01$). English teachers with 20 - 24 years of teaching experience, 58.3% of whom were in the 40 - 44 age category, experienced notably higher levels of emotional exhaustion than other English teachers. The mean score for teachers in the category of 20 - 24 years of experience was 2.64, which was significantly different at the .01 level (LSD multiple range test) from the mean scores of teachers in the categories of 5 - 9 years of experience (n=29; mean score: 1.85), 10 - 14 years of experience (n=43; mean score: 1.59), 15 - 19 years of experience (n=30; mean score: 1.64), and 25 - 29 years of experience (n=8; mean score: 1.46). English teachers with 0 - 4 years of teaching experience (n=25) had a mean score of 1.97; those with 30 or more years of teaching experience (n=12) had a mean score of 2.06.

This finding is contrary to that of Borthwick et al. (1982), who found that teachers with fewer years

years of teaching experience were more burned out than experienced teachers. Friesen (1985) found, however, that female educators in the Edmonton Public School District with 20 - 24 years of experience recorded significantly higher levels of Emotional Exhaustion than female educators in any other age category. Friesen's findings and the finding of this study lend support to the idea that burnout, at least as it is manifested in the subscale Emotional Exhaustion, is the consequence not of stress per se but of unmediated long-term stress (cf. Dedrick and Dishner, 1982).

No other oneway analyses of variance with the dependent variable Emotional Exhaustion and other independent background variables produced significant F-ratios. In the oneway analysis of variance, Emotional Exhaustion by Marital Status, however, the category Widowed, Divorced, or Separated (n=9) had a mean score (2.73) considerably higher than that of other groups. The mean score of teachers in this category was significantly different at the .01 level from the mean score of teachers in the category Married With No Children (n=22; mean score = 1.62). The mean score of married English teachers with children (n=102) was 1.86; the mean score of single English teachers (n=36) was 1.81.

Significant oneway analyses of variance with the dependent variable Depersonalization and the independent background variables. A oneway analysis of variance of Depersonalization by Specialization produced a significant F-ratio ($F(1) = 6.98$; $p < .01$). The mean score of 113 English specialists (1.04) was significantly lower than that of 56 English teachers whose field of specialization was not English (1.43). Perhaps non-specialists spent more time preparing for English classes and marking students' assignments, and became less preoccupied with the students themselves than specialists in English; therefore, they felt more distanced from students than English specialists did.

Significant oneway analyses of variance with the dependent variable Personal Accomplishment and the independent background variables. Although no oneway analyses of variance of Personal Accomplishment by the background variables produced significant F-ratios, a oneway analysis of variance of Personal Accomplishment by Age showed that the 40 - 44 age category had a lower mean score (and therefore a greater lack of personal accomplishment) than any other group of teachers. The mean Personal Accomplishment score of English teachers in this category (4.26) was significantly different from the mean score of teachers in the 35 - 39 age category (4.82) at the .01 level using the LSD

multiple range test.

Summary of the results of the significant oneways with the dependent burnout variables and the independent background variables. These analyses revealed that burnout, as defined by high scores for frequency of Emotional Exhaustion and Depersonalization, and low scores for frequency of Personal Accomplishment, is related to both the age and the years of teaching experience of English teachers, and, partly, to their marital status and their area of specialization. English teachers in the 40 - 44 age category experienced more emotional exhaustion and less personal accomplishment than other English teachers. Moreover, English teachers with 20 - 24 years of teaching experience were very much more susceptible to emotional exhaustion than other English teachers. Non-specialists in the field of English experienced higher levels of emotional exhaustion and depersonalization than specialists. Also, English teachers who were widowed, divorced, or separated recorded significantly higher mean scores on the subscale Emotional Exhaustion than single or married English teachers.

Oneway Analyses of Variance with the Dependent Needs Deficiency Variables and the Independent Background Variables

Each respondent's need deficiency for each item

in Part III of the Teacher Burnout and Needs Deficiency Questionnaire was derived by subtracting the respondent's score for his or her perception of the extent to which a particular need was being met from the score for his or her perception of the extent to which that need should be met. The sums of these differences were then divided by the number of questionnaire items in each need category to give a mean score for each respondent in each of five need areas: security, affiliation, esteem, autonomy, and self-actualization. Need deficiencies in these areas were used as the dependent variables in 14 separate oneway analyses of variance with the background variables and the date of return of questionnaires as the independent variables.

Significant oneway analyses of variance with the dependent variable Security and the independent background variables. Oneway analysis of variance of need deficiency in the area of Security by Area of Specialization produced a significant F-ratio ($F(1) = 4.04$; $p < .05$). Fifty-six non-specialists in the field of English had a higher Security need deficiency mean score (1.45) than 118 English teachers who were specialists in their field (mean score: 0.93). Perhaps teachers who were not teaching in their area of specialization were more likely to feel the impact of cutbacks and redundancy than English specialists, who were relatively secure in

their positions.

Widowed, divorced, or separated English teachers (n=10) recorded greater Security need deficiency (mean score: 1.80) than single English teachers (n=36; mean score: 1.00), married English teachers with children (n=102; mean score: 1.07), or married English teachers without children (n=22; mean score: 0.91). Perhaps stressful life events such as divorce or the death of a spouse increased teachers' sense of insecurity.

Significant oneway analyses of variance with the dependent variable Affiliation and the independent background variables. Oneway analysis of variance of need deficiency in the area of Affiliation by Size of School produced a significant F-ratio ($F(3) = 3.20$; $p < .05$) English teachers who taught in schools with fewer than 150 students (n=30) exhibited greater need deficiency in the area of Affiliation than English teachers who taught in larger schools. The mean Affiliation need deficiency score for this group (1.41) was significantly different both from the mean score of English teachers (n=53) who taught in schools with 151 - 300 students (0.73) and from teachers (n=50) who taught in schools with over 500 students, using the LSD Multiple Range Test (.01 level). The mean score for English teachers (n=40) in schools with 301 - 500 students was 0.93. Because teachers in small

schools naturally had fewer colleagues and, therefore, fewer potential friends on staff, need deficiency in the area of Affiliation was likely to be greater in smaller schools than in larger schools.

Widowed, divorced, or separated English teachers (n=10) also exhibited greater need deficiency in the area of Affiliation than other English teachers. The mean score for this group was 1.25, compared with 0.88 for single English teachers, 0.88 for married English teachers with children, and 0.74 for married English teachers without children.

Significant oneway analyses of variance with the dependent variable Esteem and the independent background variables. Oneway analysis of variance of need deficiency in the area of Esteem by Age produced a significant F-ratio ($F(6) = 2.13$; $p < .05$). English teachers in the 40 - 44 age category (n=30) exhibited greater need deficiency in the area of Esteem than English teachers in all other age categories. The mean need deficiency score for the 40 - 44 age category (2.13) was significantly different at the .01 level (using the LSD Multiple Range Test) both from the mean score of English teachers (n=30) in the 30 - 34 age category (1.03) and from the mean score of the those (n=42) in the 35 - 39 category (1.21). The mean Esteem need deficiency scores were 1.14 for teachers (n=7) aged

20 - 24, 1.64 for teachers (n=24) aged 25 - 29, 1.64 for teachers (n=14) aged 45 - 49, and 1.53 for teachers (n=25) aged 50 years or more. Again, this finding supports the idea that during the "mid-life crisis" teachers experience less satisfaction and fulfillment from their work than during other periods in their lives. This finding contradicts that of Anderson and Iwanicki (1984), who found that need deficiency in the area of Esteem was greater for younger, less experienced teachers than for older, more experienced teachers.

The ten widowed, divorced, or separated English teachers exhibited a greater mean need deficiency score (2.00) in the area of Esteem than single English teachers (1.39), married English teachers with children (1.51), or married English teachers without children (1.29).

Significant oneway analyses of variance with the dependent variable Self-actualization and the independent background variables. Although these analyses produced no significant F-ratios, the mean need deficiency score in the area of Self-actualization for 117 English specialists (1.55) was notably lower than the mean score for 56 English teachers whose area of specialization was not English (1.94). For widowed, divorced, or separated English teachers, the mean need deficiency score in the

area of Self-actualization was 2.47, higher than that for single English teachers (1.65), the score for married English teachers with children (1.69), the score for married English teachers without children (1.50).

Summary of the results of the significant oneways with dependent needs deficiency variables and independent background variables. Oneway analyses of variance of Autonomy need deficiency by the independent background variables showed no significant F-ratios. Other analyses revealed that no single independent background variable varied significantly with two or more of the dependent needs deficiency variables. Specialists in English exhibited a lower mean need deficiency score in the area of Security (and, to a lesser extent, in the area of Self-actualization). English teachers in small schools experienced a greater Affiliation need deficiency than teachers in larger schools. English teachers in the 40 - 44 age category felt greater Esteem need deficiency than other English teachers. Although the number of widowed, divorced, or separated respondents (n=10) was too small to affect very much the F-ratio in the analyses using Marital Status as the independent variable, the mean needs deficiency scores for this group were larger in the areas of Security, Affiliation, Esteem, and Self-actualization than the scores for other English teachers.

Oneway Analyses of Variance with the Dependent Job-Related Variables and the Independent Background Variables

Thirteen job-related factors were used as dependent variables in 14 separate oneway analyses of variance with the background variables and the date of return of questionnaires as the independent variables.

Significant oneway analyses of variance with the dependent variable Staff Reduction and the independent background variables. Oneway analysis of variance of Staff Reduction by Size of School produced a significant F-ratio ($F(3) = 2.78$; $p < .05$). The analysis revealed that the smaller the school in which they teach, the larger the amount of burnout English teachers attributed to staff reduction. Mean scores for the amount of burnout attributed to Staff Reduction were 3.77 for English teachers (n=30) in schools with less than 150 students, 3.60 for English teachers (n=55) in schools with 151 - 300 students, 2.92 for English teachers (n=38) in schools with 301 - 500 students, and 2.67 for English teachers (n=46) in schools with over 500 students.

Oneway analysis of variance of Staff Reduction by Type of Community produced a significant F-ratio ($F(1) = 4.56$; $p < .05$). Ninety English teachers in rural schools attributed more burnout to staff reduction (mean score: 3.56) than 80 English teachers in urban schools (mean score: 2.89). These results

reflect the fact that many small rural schools in Saskatchewan have experienced staff reductions as a result of declining enrolments.

Significant oneway analyses of variance with the dependent variable Isolation in the Classroom and the independent background variables. Oneway analysis of variance of Isolation in the Classroom by Type of Community produced a significant F-ratio ($F(1) = 8.27$; $p < .01$). Ninety-one urban English teachers attributed more burnout to Isolation in the Classroom (mean score: 2.65) than 89 rural English teachers (mean score: 1.92). In rural schools, class sizes were considerably smaller: 88.4% of the respondents reporting average class sizes of less than 20 and 70.4% reporting class sizes of 20 - 24 students taught in rural schools, whereas 83.3% of the teachers with average class sizes of 25 - 29 students and 90.0% with class sizes of 30 - 34 students taught in urban schools. In rural schools, with fewer students in the average classroom, English teachers evidently felt less isolated and alone than their urban colleagues. Moreover, with fewer colleagues on staff, rural teachers probably have closer contact with administrators, which also may help alleviate feelings of isolation.

Oneway analysis of variance of Isolation in the Classroom by Percentage of Teaching Time in the area

of English produced a significant F-ratio ($F(1) = 3.13$; $p < .05$). English teachers who taught English for less than 50% of the school day (n=46) attributed more burnout to Isolation in the Classroom (mean score: 2.78) than either those who taught English for 51 - 75% of the school day (n=39; mean score: 1.97) or those who taught English for 76 - 100% of the school day (n=83; mean score: 2.11). Whereas most respondents (84.9%) who taught English for 76 - 100% of the teaching day were specialists in the field of English, most respondents (57.4%) who taught English for 30 - 50% were non-specialists. Not surprisingly, then, oneway analysis of variance of Isolation in the Classroom by Area of Specialization produced a significant F-ratio ($F(1) = 10.68$; $p < .01$). Non-specialists in the area of English (n=57) attributed considerably more burnout to Isolation in the Classroom (mean score: 2.86) than English specialists (n=112; mean score: 1.98). Evidently, specialists with a large teaching load of English felt less isolated and, perhaps, more comfortable in the classroom than non-specialists with less than 50% of their teaching time in the area of English.

Significant oneway analyses of variance with the dependent variable Staff Conflict and the independent background variables. Oneway analysis of variance of Staff Conflict by Age produced a significant F-ratio

($F(6) = 2.38$; $p < .05$). Generally, English teachers in their forties attributed more burnout to Staff Conflict than either younger or older teachers. The mean score for English teachers (n=13) in the 45 - 49 age category was 3.30). The mean score for English teachers (n=30) in the 40 - 44 age category (3.27) was significantly different at the .01 level (LSD multiple range test) from those (n=26) in the 50 and over age category (mean score: 2.00). The mean scores for other English teachers were 2.14 for those in the 30 - 34 age category (n=27), 2.44 for those in the 35 - 39 age category (n=43), 2.50 for those in the 20 - 24 age category (n=6), and 3.24 for those in the 25 - 29 age category (n=25).

Significant oneway analyses of variance with the dependent variable Lack of Parental Support and the independent background variables. Oneway analysis of variance of Lack of Parental Support by Membership in SETA produced a significant F-ratio ($F(1) = 3.94$; $p < .05$). Members of SETA (n=49) attributed less burnout to Lack of Parental Support (mean score: 3.20) than non-members (n=121; mean score: 3.83). Perhaps SETA members, with stronger commitments to the profession than non-members, developed stronger communication channels with the parents of their students.

Significant oneway analyses of variance with the

dependent variable Lack of Participation in Decision Making and the independent background variables. Oneway analysis of variance of Lack of Participation in Decision Making by Area of Specialization produced a significant F-ratio ($F(1) = 4.35$; $p < .05$). English specialists (n=113) attributed less burnout to Lack of Participation in Decision Making (mean score: 2.96) than non-specialists (n=57; mean score: 3.58). Perhaps non-specialists were less involved in curriculum decision making than English specialists.

Significant oneway analyses of variance with the dependent variable Student Discipline Problems and the independent background variables. Oneway analysis of variance of Student Discipline Problems by Percentage of Teaching Time in the Area of English produced a significant F-ratio ($F(2) = 4.89$; $p < .01$). The greater the percentage of time spent teaching English, the less burnout English teachers attributed to Student Discipline Problems. The mean score for English teachers (n=46) in the 30 - 50% category (3.80) was significantly different at the .01 level (LSD multiple range test) from the mean score for English teachers (n=83) in the 76 - 100% category (2.78). The mean score for English teachers (n=40) in the 51 - 75% categroy was 3.40.

Oneway analysis of variance of Student Discipline Problems by Area of Specialization produced a significant

F-ratio ($F(1) = 5.80$; $p < .05$). Non-specialists in the field of English (n=57) attributed significantly more burnout (mean score: 3.68) to Student Discipline Problems than English specialists (n=113; mean score: 2.96). Specialists with a heavier load in English seemed not to be as disturbed by student discipline problems as non-specialists with less than 50% of their teaching time in the area of English. Since 68.5% of the respondents who were SETA members taught English 76 - 100% of the teaching day, and 83.3% of the respondents who were SETA members were specialists in English, it is not surprising that members of SETA were also less bothered by student discipline problems than non-members were. Oneway analysis of variance of Student Discipline Problems by Membership in SETA produced a significant F-ratio ($F(1) = 5.91$; $p < .05$). Non-members of SETA (n=121) attributed significantly more burnout to Student Discipline Problems (mean score: 3.41) than members of SETA (n=49; mean score: 2.65).

Significant oneway analyses of variance with the dependent variable Work Overload and Time Demands and the independent background variables. Oneway analysis of variance of Work Overload and Time Demands by Age did not produce a significant F-ratio; however, English teachers in the 40 - 44 age category (n=30) attributed more burnout to Work Overload and Time Demands than teachers in any other age category. The mean score of

English teachers in the 40 - 44 age category (5.00) was significantly different at the .01 level (LSD multiple range test) from the mean score of teachers in the 35 - 39 age category (n=43; mean score: 3.72). Mean scores for the amount of burnout attributed to Work Overload and Time Demands were 4.92 for English teachers aged 45 - 49 (n=13), 4.84 for teachers aged 25 - 29 (n=25), 4.46 for those 50 and over (n=26), 4.54 for those aged 30 - 34 (n=26), and 3.71 for those aged 20 - 24 (n=7). Perhaps it is because English teachers in their forties feel that they have more work and less time in which to do it than other English teachers that they feel more emotionally exhausted than others.

Oneway analysis of variance of Work Overload and Time Demands by Type of School produced a significant F-ratio ($F(1) = 4.22$; $p < .05$). English teachers in separate schools (n=18) attributed significantly more burnout (mean score: 5.28) to Work Overload and Time Demands than English teachers in public schools (n=144; mean score: 4.32). English teachers in private schools were excluded from the analysis of variance because their numbers were insufficient.

Oneway analysis of variance of Work Overload and Time Demands by Type of Community produced a significant F-ratio ($F(1) = 4.16$; $p < .05$). English teachers in urban schools (n=80) attributed significantly more

burnout to Work Overload and Time Demands than English teachers in rural schools (n=90). With higher pupil-teacher ratios and larger class sizes in city schools, urban English teachers probably had more marking than their rural colleagues.

Significant oneway analyses of variance with the dependent variable Role Conflict and Role Ambiguity and the independent background variables. Oneway analysis of variance of Role Conflict and Role Ambiguity by Experience ($F(6) = 1.61$; $p > .05$) showed that the mean score of teachers (n=8) with 25 - 29 years of experience (1.75) was significantly different at the .01 level (LSD multiple range test) from the mean score of English teachers (n=27) with 0 - 4 years of experience (3.63). Perhaps inexperienced English teachers were more likely to have overextended themselves and less likely to have clarified their own roles than experienced teachers.

Oneway analysis of variance of Role Conflict and Role Ambiguity by Class Size produced a significant F-ratio ($F(3) = 3.69$; $p < .05$). Surprisingly, the mean score (3.58) of English teachers (n=43) with average class sizes of less than 20 students was significantly higher than the mean score (1.90) of English teachers (n=10) with average class sizes of 30 - 34. These two scores were significantly different at the .01 level (LSD multiple range test).

Oneway analysis of variance of Role Conflict and Role Ambiguity by Percentage of Teaching Time in the Area of English produced a significant F-ratio ($F(2) = 3.93$; $p < .05$) . The higher the percentage of teaching time in the field of English, the lower the amount of burnout English teachers attributed to Role Conflict and Role Ambiguity. The mean score of teachers (n=45) who taught English for 30 - 50% of the school day (3.38) was significantly different at the .01 level (LSD multiple range test) from the mean score of those (n=82) who taught English 76 - 100% of the day (2.55). English teachers (n=40) who taught English for 51 - 75% of the day had a mean score of 3.15.

Oneway analysis of variance of Role Conflict and Role Ambiguity by Area of Specialization produced a significant F-ratio ($F(1) = 7.64$; $p < .01$). Non-specialists in the field of English (n=57; mean score: 3.42) attributed significantly more burnout to Role Conflict and Role Ambiguity than English specialists (n=111; mean score: 2.66). Specialists who taught mostly English experienced less role conflict and role ambiguity, and less burnout, than non-specialists who taught English for less than 50% of the teaching day.

Summary of the results of the significant oneways with the dependent job-related variables and the independent background variables. Five of the 13

job-related factors did not vary significantly with any of the background variables: Involuntary Transfer, Public Criticism of Teachers and Education, Lack of Administrative Support, Low Status of the Teaching Profession, and Lack of Promotional Opportunities in Teaching.

The background variable Age varied significantly with two job-related factors: Staff Conflict; Work Overload and Time Demands. In both cases, English teachers in their forties attributed more burnout to these factors than other English teachers.

The background variable Years of Teaching Experience varied with the dependent variable Role Conflict and Role Ambiguity: less experienced English teachers generally attributed more burnout to Role Conflict and Role Ambiguity than experienced English teachers.

The background variable Type of School varied with Work Overload and Time Demands. English teachers in separate schools attributed more burnout to Work Overload and Time Demands than English teachers in public schools.

English teachers in small schools attributed more burnout to Staff Reduction than English teachers in large schools; surprisingly, English teachers with small class sizes attributed more burnout to Role Conflict and Role Ambiguity than English teachers with large class sizes.

The background variable Type of Community varied with three dependent variables: Staff Reduction, Isolation in the Classroom, and Work Overload and Time Demands. Whereas English teachers in urban schools attributed significantly more burnout to Isolation in the Classroom, and Work Overload and Time Demands than their rural counterparts, rural English teachers attributed significantly more burnout to Staff Reduction than urban English teachers.

The background variable Percentage of Teaching Time in the Area of English varied with three dependent variables: Isolation in the Classroom, Student Discipline Problems, and Role Conflict and Role Ambiguity. In each case, the greater the percentage of teaching time in the field of English, the smaller the amount of burnout English teachers attributed to these job-related factors.

The background variable Area of Specialization varied with four dependent variables: Isolation in the Classroom, Lack of Participation in Decision Making, Student Discipline Problems, and Role Conflict and Role Ambiguity. In each case, English specialists attributed significantly less burnout to these job-related factors than did non-specialists in the field of English.

The background variable Membership in SETA varied significantly with two dependent variables: Lack of Parental Support and Student Discipline Problems.

In both cases, members of SETA attributed significantly less burnout to these job-related factors than did non-members of SETA.

Summary of the Results of the Significant Oneway Analyses of Variance with the Independent Background Variables

The background variable Age varied significantly with five dependent variables. English teachers in the 40 - 44 age category experienced significantly more Emotional Exhaustion, less Personal Accomplishment, greater need deficiency in the area of Esteem, and more burnout due to Staff Conflict, and Work Overload and Time Demands, than English teachers in any other age category.

The background variable Years of Teaching Experience, which correlated highly with Age ($r = .87$), varied with Emotional Exhaustion and Role Conflict and Role Ambiguity: teachers with 20 - 24 years of teaching experience were considerably more exhausted emotionally than English teachers in other categories; less experienced English teachers generally attributed more burnout to Role Conflict and Role Ambiguity than did experienced English teachers.

When Marital Status was used as an independent variable, English teachers who were widowed, divorced, or separated recorded higher mean scores for Emotional Exhaustion and greater need deficiencies in the areas

of Security, Affiliation, Esteem, and Self-actualization than English teachers in other marital categories.

Type of School varied only with Work Overload and Time Demands: English teachers in public schools attributed less burnout to this factor than did English teachers in separate schools.

The background variable Size of School varied with Affiliation and Staff Reduction. English teachers in small schools had a greater need deficiency in the area of Affiliation and attributed more burnout to Staff Reduction than did English teachers in large schools.

The variable Average Class Size varied only with Role Conflict and Role Ambiguity: English teachers with small classes attributed more burnout to this factor than English teachers with large class sizes.

Type of Community varied with Staff Reduction, Isolation in the Classroom, and Work Overload and Time Demands. English teachers in urban schools attributed significantly more burnout to Isolation in the Classroom, and Work Overload and Time Demands than rural teachers did; however, rural English teachers attributed significantly more burnout to Staff Reduction than urban English teachers did.

The background variables Percentage of Teaching Time in the Area of English, Field of Specialization, and Membership in SETA correlated quite highly with one

another and revealed similar results when used as independent variables in separate oneway analyses. Percentage of Teaching Time in the Area of English varied with Isolation in the Classroom, Student Discipline Problems, and Role Conflict and Role Ambiguity. As their percentage of teaching time in the area of English increased, English teachers attributed less burnout to these job-related factors. Field of Specialization varied with Emotional Exhaustion, Depersonalization, Security, Isolation in the Classroom, Lack of Participation in Decision Making, Student Discipline Problems, and Role Conflict and Role Ambiguity: non-specialists in the field of English had higher scores on the Emotional Exhaustion and Depersonalization subscales and greater need deficiencies in the areas of Security and Self-actualization, and they attributed significantly more burnout to these job-related factors. Membership in SETA varied with Lack of Parental Support and Student Discipline Problems: members of SETA attributed significantly less burnout to these factors than did non-members.

The background variables Sex, Level of Education, and Grade Level Taught varied with none of the dependent variables.

The Levels of Burnout and Needs Deficiency of English Teachers in Relation to the Job-Related Factors Associated with Burnout

Another purpose of this study was to examine the levels of burnout and needs deficiency of English teachers in relation to 13 job-related factors: Staff Reduction, Involuntary Transfer, Isolation in the Classroom, Staff Conflict, Public Criticism of Teachers and Education, Lack of Parental Support, Lack of Administrative Support, Low Status of the Teaching Profession, Lack of Participation in Decision Making, Student Discipline Problems, Lack of Promotional Opportunities in Teaching, Work Overload and Time Demands, and Role Conflict and Role Ambiguity.

Tests of Hypotheses Involving the Level of Burnout in Relation to the Job-Related Factors

Oneway analyses of variance with three dependent burnout variables (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) and 13 job-related independent variables were run to test three hypotheses. The decision rule in accepting each hypothesis was set at the .05 level of significance.

Hypothesis 1: The perceived level of Emotional Exhaustion of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level

of Emotional Exhaustion of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of Emotional Exhaustion by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 12 of 13 independent variables. The perceived level of Emotional Exhaustion of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 3.07$; $p < .01$);

(b) Isolation in the Classroom ($F(5) = 6.68$; $p < .01$);

(c) Staff Conflict ($F(6) = 3.66$; $p < .01$);

(d) Public Criticism of Teachers and Education ($F(6) = 7.09$; $p < .01$);

(e) Lack of Parental Support ($F(6) = 5.78$; $p < .01$);

(f) Lack of Administrative Support ($F(6) = 3.45$; $p < .01$);

(g) the Low Status of the Teaching Profession ($F(6) = 5.23$; $p < .01$);

(h) the Lack of Participation in Decision Making ($F(6) = 7.49$; $p < .01$);

(i) Student Discipline Problems ($F(6) = 7.33$; $p < .01$);

(j) the Lack of Promotional Opportunities in

Teaching ($F(6) = 9.85$; $p < .01$);

(k) Work Overload and Time Demands ($F(6) = 11.59$; $p < .01$);

(l) Role Conflict and Role Ambiguity ($F(5) = 6.41$; $p < .01$).

As expected, mean scores for Emotional Exhaustion increased as the amount of burnout associated with each job-related factor increased. Refer to Table 12 for the mean Emotional Exhaustion scores of the various categories of response for each job-related factor which varied significantly with Emotional Exhaustion.

Hypothesis 2: The perceived level of Depersonalization of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of Depersonalization by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 10 of 13 independent variables. The perceived level of Depersonalization of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 2.98$; $p < .01$);

(b) Involuntary Transfer ($F(5) = 3.74$; $p < .01$);

Table 12

Emotional Exhaustion Mean Scores for the Categories of Response of the Independent Job-Related Variables

Category of Response	Staff Reduction	Isolation in the Classroom	Staff Conflict	Public Criticism	Lack of Parental Support	Lack of Administrative Support
Very small amount	1.72	1.64	1.57	1.33	1.26	1.54
Small amount	1.58	1.62	1.70	1.36	1.82	1.67
Moderately small amount	1.64	2.25	1.87	1.84	1.57	1.99
Moderate amount	1.89	2.06	2.07	1.82	1.69	1.75
Moderately high amount	2.35	2.89	2.57	1.92	2.17	2.40
High amount	1.35	------	2.27	2.10	2.06	2.25
Very high amount	2.60	3.51	3.00	2.92	3.18	2.58
Total	1.86	1.89	1.87	1.88	1.87	1.88

Table 12 (Continued)

Emotional Exhaustion Mean Scores for the Categories of Response of the Independent Job-Related Variables

Category of Response	Low Status of the Teaching Profession	Lack of Participation in Decision Making	Student Discipline Problems	Lack of Promotional Opportunities	Work Overload and Time Demands	Role Conflict and Role Ambiguity
Very small amount	1.57	1.38	1.34	1.54	1.17	1.39
Small amount	1.56	1.53	1.58	1.35	1.88	1.67
Moderately small amount	1.52	1.90	1.69	1.32	1.08	1.81
Moderate amount	1.999	1.97	2.21	2.01	1.74	1.90
Moderately high amount	2.20	2.14	2.04	2.37	1.86	2.85
High amount	2.94	2.46	2.37	2.27	1.81	2.85
Very high amount	2.91	3.54	3.50	3.31	3.03	------
Total	1.88	1.87	1.87	1.87	1.88	1.80

(c) Isolation in the Classroom ($F(5) = 2.92$; $p < .05$);

(d) Public Criticism of Teachers and Education ($F(6) = 3.43$; $p < .01$);

(e) the Lack of Parental Support ($F(6) = 3.56$; $p < .01$);

(f) the Lack of Participation in Decision Making ($F(6) = 3.67$; $p < .01$);

(g) Student Discipline Problems ($F(6) = 8.05$; $p < .01$);

(h) the Lack of Promotional Opportunities in Teaching ($F(6) = 3.48$; $p < .01$);

(i) Work Overload and Time Demands ($F(6) = 2.76$; $p < .05$);

(j) Role Conflict and Role Ambiguity ($F(5) = 4.30$; $p < .01$).

As anticipated, mean scores for Depersonalization increased as the amount of burnout associated with each job-related factor increased. Refer to Table 13 for the mean Depersonalization scores of the various categories of response for each job-related factor which varied significantly with Depersonalization.

Hypothesis 3: The perceived level of Personal Accomplishment of English teachers decreases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the

Table 13

Depersonalization Mean Scores for the Categories of Response of the Independent Job-Related Variables

Category of Response	Staff Reduction	Involuntary Transfer	Isolation in the Classroom	Public Criticism	Lack of Parental Support
Very small amount	1.14	1.08	0.99	0.75	0.62
Small amount	1.09	0.76	1.21	0.90	0.99
Moderately small amount	0.88	0.84	1.08	1.11	1.09
Moderate amount	1.78	1.79	1.56	1.15	1.19
Moderately high amount	1.27	0.96	2.00	1.41	1.68
High amount	0.48	------	------	1.46	1.39
Very high amount	1.79	1.73	1.60	1.69	1.55
Total	1.67	1.15	1.19	1.18	1.18

Table 13 (Continued)

Depersonalization Mean Scores for the Categories of Response of the Independent Job-Related Variables

Category of Response	Lack of Participation in Decision Making	Student Discipline Problems	Lack of Promotional Opportunities	Work Overload and Time Demands	Role Conflict and Role Ambiguity
Very small amount	0.72	0.67	1.08	0.98	0.93
Small amount	1.12	0.92	0.90	1.41	0.89
Moderately small amount	1.11	0.87	0.93	0.83	1.21
Moderate amount	1.31	1.59	1.08	0.94	1.23
Moderately high amount	1.51	1.46	1.32	1.51	1.83
High amount	1.47	1.79	1.34	1.05	1.95
Very high amount	1.89	1.98	2.04	1.55	------
Total	1.18	1.18	1.18	1.18	1.17

perceived level of Personal Accomplishment of English teachers decreased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of Personal Accomplishment by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for only 2 of 13 independent variables. The perceived level of Personal Accomplishment of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Involuntary Transfer ($F(3) = 2.95$; $p < .05$);

(b) Student Discipline Problems ($F(6) = 3.53$; $p < .01$).

Mean scores for Personal Accomplishment decreased as the amount of burnout associated with these job-related factors increased. Refer to Table 14 for the mean Personal Accomplishment scores of the various categories of response for each job-related factor which varied significantly with Personal Accomplishment. Thus, Hypothesis 3 was not fully substantiated by these data.

Summary of the tests of hypotheses involving the level of burnout in relation to the job-related factors. Hypotheses 1 and 2 were supported by the data; Hypothesis 3, however, was not. The dependent variables Emotional Exhaustion and Depersonalization varied with most of the job-related factors. Indeed, the F-probability

Table 14

Personal Accomplishment Mean Scores for the Categories of Response of the Independent Job-Related Variables

Category of Response	Involuntary Transfer	Student Discipline Problems
Very small amount	4.59	4.89
Small amount	4.74	4.66
Moderately small amount	------	4.59
Moderate amount	3.98	4.44
Moderately high amount	------	4.52
High amount	-------	3.88
Very high amount	4.26	4.05
Total	4.51	4.53

of the analyses of variance of Emotional Exhaustion by eight of the job-related variables--Isolation in the Classroom, Public Criticism of Teachers and Education, Lack of Parental Support, Lack of Participation in Decision Making, Student Discipline Problems, Lack of Promotional Opportunities in Teaching, Work Overload

and Time Demands, and Role Conflict and Role Ambiguity--was zero, indicating with certainty that Emotional Exhaustion varied significantly with these factors associated with burnout; conversely, Personal Accomplishment varied with only two of the job-related factors, indicating, perhaps, that Personal Accomplishment was less accurate as a measure of burnout than Emotional Exhaustion or Depersonalization.

Tests of Hypotheses Involving the Level of Needs Deficiency in Relation to the Job-Related Factors

Oneway analyses of variance with five dependent needs deficiency variables (Need Deficiency in the Areas of Security, Affiliation, Esteem, Autonomy, and Self-actualization) and 13 job-related independent variables were run to test five hypotheses. The decision rule in accepting each hypothesis was set at the .05 level of significance.

Hypothesis 4: The perceived level of need deficiency in the area of Security of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of need deficiency in the area of Security of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of Security need deficiency by

the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 11 of 13 variables. Need deficiency in the area of Security of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 5.25$; $p < .01$);

(b) Involuntary Transfer ($F(5) = 5.22$; $p < .01$);

(c) Isolation in the Classroom ($F(5) = 7.69$; $p < .01$);

(d) Staff Conflict ($F(5) = 5.53$; $p < .01$);

(e) Public Criticism of Teachers and Education ($F(6) = 2.31$; $p < .05$);

(f) the Lack of Parental Support ($F(6) = 2.47$; $p < .05$);

(g) the Lack of Administrative Support ($F(6) = 5.98$; $p < .01$);

(h) the Low Status of the Teaching Profession ($F(6) = 4.73$; $p < .01$);

(i) the Lack of Participation in Decision Making ($F(6) = 4.39$; $p < .01$);

(j) Student Discipline Problems ($F(6) = 2.18$; $p < .05$);

(k) Role Conflict and Role Ambiguity ($F(5) = 2.38$; $p < .05$).

Mean scores for need deficiency in the area of Security increased as the amount of burnout associated with these job-related factors increased. Refer to Table 15 for the mean Security need deficiency scores of the various categories of response for each job-related factor which varied significantly with the dependent variable.

In the theoretical construct for this study, the author speculated that Staff Reduction and Involuntary Transfer would threaten English teachers' attempts to fulfill their need for security. The mean need deficiency scores of English teachers who attributed high (mean Security deficiency score: 2.44) or very high (mean score: 2.15) amounts of burnout to Staff Reduction were significantly different at the .01 level (LSD multiple range test) from the groups who attributed very small (mean score: 0.47), small (mean score: 0.70) or moderately small (mean score: 0.80) amounts of burnout to Staff Reduction. The mean need deficiency score (2.82) of English teachers who attributed a very high amount of burnout to Involuntary Transfer was significantly different at the .01 level (LSD multiple range test) from the mean score (0.71) of those who attributed a very small amount of burnout to this job-related factor.

Table 15

Mean Scores for Need Deficiency in the Area of Security for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Staff Reduction		Involuntary Transfer		Isolation in the Classroom		Staff Conflict		Public Criticism	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	47	0.47	105	0.71	83	0.59	64	0.67	26	0.31
Small amount	27	0.70	15	1.67	30	1.17	35	0.77	27	1.41
Moderately small amount	20	0.80	6	1.00	13	0.92	19	1.05	28	0.71
Moderate amount	27	1.04	15	1.60	25	1.56	22	1.00	26	1.27
Moderately high amount	17	1.65	5	1.60	5	2.60	9	2.00	23	0.96
High amount	9	2.44	insuf.no.		insuf.no.		10	2.00	13	1.46
Very high amount	20	2.15	11	2.82	8	3.38	9	3.22	25	1.64
Total	167	1.07	157	1.08	164	1.07	168	1.07	168	1.08

Table 15 (Continued)

Mean Scores for Need Deficiency in the Area of Security for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Lack of Parental Support		Lack of Administrative Support		Low Status of the Teaching Profession		Lack of Participation in Decision M.		Student Discipline Problems		Role Conflict and Role Ambiguity	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	24	0.63	57	0.44	44	0.73	39	0.46	41	0.73	51	0.67
Small amount	35	0.89	32	0.81	25	0.96	37	0.68	38	0.82	28	0.68
Moderately small amount	23	0.70	14	1.14	25	0.44	19	1.21	19	1.05	17	1.18
Moderate amount	29	0.97	16	1.00	40	1.30	33	1.09	26	1.04	46	1.33
Moderately high amount	20	1.00	14	1.79	13	0.69	19	1.47	19	1.11	7	0.86
High amount	25	2.00	14	1.57	12	2.83	12	2.17	18	1.83	14	2.00
Very high amount	13	1.62	20	2.50	9	1.89	10	2.50	8	2.38	insuf. no.	
Total	169	1.07	167	1.08	168	1.07	169	1.07	169	1.07	163	1.03

Hypothesis 5: The perceived level of need deficiency in the area of Affiliation of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of need deficiency in the area of Affiliation of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of need deficiency in the area of Affiliation by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for all 13 job-related variables. Need deficiency in the area of Affiliation of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 4.91$; $p < .01$);

(b) Involuntary Transfer ($F(5) = 3.81$; $p < .01$);

(c) Isolation in the Classroom ($F(5) = 8.30$; $p < .01$);

(d) Staff Conflict ($F(6) = 14.91$; $p < .01$);

(e) Public Criticism of Teachers and Education ($F(6) = 4.98$; $p < .01$);

(f) the Lack of Parental Support ($F(6) = 5.69$; $p < .01$);

(g) the Lack of Administrative Support ($F(6) = 7.02$; $p < .01$);

(h) the Low Status of the Teaching Profession ($F(6) = 7.16$; $p < .01$);

(i) the Lack of Participation in Decision Making ($F(6) = 6.13$; $p < .01$);

(j) Student Discipline Problems ($F(6) = 5.34$; $p < .01$);

(k) the Lack of Promotional Opportunities in Teaching ($F(6) = 2.43$; $p < .05$);

(l) Work Overload and Time Demands ($F(6) = 2.30$; $p < .05$);

(m) Role Conflict and Role Ambiguity ($F(5) = 10.97$; $p < .01$).

Generally, mean scores for need deficiency in the area of Affiliation increased as the amount of burnout associated with the job-related factors increased. Refer to Table 16 for the mean Affiliation need deficiency scores of the various categories of response for each job-related factor.

In the theoretical construct for this study, the author speculated that two job-related factors--Staff Conflict and Isolation in the Classroom--would most threaten English teachers' need for affiliation. The mean need deficiency scores of English teachers who attributed very high (mean Affiliation deficiency score: 3.11) or high (mean score: 2.15) amounts of burnout to Staff Conflict were significantly different at the .01 level (LSD multiple range test) from the groups that attributed very small (mean score: 0.49),

Table 16

Mean Scores for Need Deficiency in the Area of Affiliation for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Staff Reduction		Involuntary Transfer		Isolation in the Classroom		Staff Conflict		Public Criticism	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	47	0.86	103	0.72	82	0.66	62	0.49	26	0.27
Small amount	26	0.38	15	1.00	30	0.55	35	0.63	27	0.52
Moderately small amount	20	0.68	6	0.58	13	1.15	19	0.71	27	0.63
Moderate amount	26	0.92	15	1.07	25	1.14	22	1.05	26	1.10
Moderately high amount	17	0.97	5	1.60	5	1.80	9	1.44	22	1.36
High amount	9	0.50	insuf. no.		insuf. no.		10	2.15	13	1.35
Very high amount	20	1.98	11	2.09	7	2.86	9	3.11	25	1.50
Total	165	0.90	155	0.90	162	0.88	166	0.91	166	0.91

Table 16 (Continued)

Mean Scores for Need Deficiency in the Area of Affiliation for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Lack of Parental Support		Lack of Administrative Support		Low Status of the Teaching Profession		Lack of Participation in Decision M.		Student Discipline Problems	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	24	0.65	57	0.50	43	0.45	39	0.32	41	0.51
Small amount	35	0.66	30	0.65	25	0.90	36	0.53	38	0.75
Moderately small amount	23	0.30	14	0.79	25	0.46	19	1.18	19	0.63
Moderate amount	27	0.69	16	0.81	39	1.03	33	1.02	25	0.84
Moderately high amount	20	1.20	14	1.50	13	1.19	19	1.55	19	1.37
High amount	25	1.66	14	1.25	12	2.38	11	1.59	17	1.38
Very high amount	13	1.69	20	2.05	9	1.56	10	1.70	8	2.44
Total	167	0.91	165	0.92	166	0.91	167	0.91	167	0.91

Table 16 (Continued)

Mean Scores for Need Deficiency in the Area of Affiliation for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Lack of Promotional Opportunities in Teaching		Work Overload and Time Demands		Role Conflict and Role Ambiguity	
	Count	Mean	Count	Mean	Count	Mean
Very small amount	60	0.72	12	0.42	50	0.40
Small amount	23	0.59	16	1.16	28	0.50
Moderately small amount	13	0.58	24	0.58	17	0.74
Moderate amount	28	0.95	34	0.81	45	1.13
Moderately high amount	10	1.35	20	0.75	7	1.43
High amount	16	1.34	29	0.90	14	2.32
Very high amount	16	1.56	31	1.48	insuf. no.	
Total	166	0.91	166	0.91	161	0.87

small (mean score: 0.67), moderately small (mean score: 0.71) or moderate amounts of burnout to Staff Conflict. The mean Affiliation deficiency score of English teachers who attributed a very high amount of burnout to Isolation in the Classroom (mean score: 2.86) was significantly different at the .01 level (LSD multiple range test) from those who attributed a very small amount (mean score: 0.66), a small amount (mean score: 0.55), a moderately small amount (mean score: 1.15) or a moderate amount (mean score: 1.14) of burnout to Isolation in the Classroom. A high F-ratio (10.97) for the analysis of variance of Affiliation deficiency by Role Conflict and Role Ambiguity indicated that these two variables also varied together closely.

Hypothesis 6: The perceived level of need deficiency in the area of Esteem of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of need deficiency in the area of Esteem of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of need deficiency in the area of Esteem by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 12 of 13 job-related variables. Need deficiency in the area of Esteem of English teachers in Saskatchewan

varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 3.72$; $p < .01$);

(b) Isolation in the Classroom ($F(5) = 11.69$; $p < .01$);

(c) Staff Conflict ($F(6) = 6.78$; $p < .01$);

(d) Public Criticism of Teachers and Education ($F(6) = 8.71$; $p < .01$);

(e) the Lack of Parental Support ($F(6) = 6.24$; $p < .01$);

(f) the Lack of Administrative Support ($F(6) = 9.21$; $p < .01$);

(g) the Low Status of the Teaching Profession ($F(6) = 11.86$; $p < .01$);

(h) the Lack of Participation in Decision Making ($F(6) = 18.95$; $p < .01$);

(i) Student Discipline Problems ($F(6) = 3.62$; $p < .01$);

(j) the Lack of Promotional Opportunities in Teaching ($F(6) = 6.82$; $p < .01$);

(k) Work Overload and Time Demands ($F(6) = 3.62$; $p < .01$);

(l) Role Conflict and Role Ambiguity ($F(5) = 6.12$; $p < .01$).

Mean scores for need deficiency in the area of Esteem generally increased as the amount of burnout attributed to each of these job-related factors increased. Refer

to Table 17 for the mean Esteem need deficiency scores of the various categories of response for each job-related factor which varied significantly with the dependent variable.

In developing the theoretical construct for this study, the author speculated that four job-related factors--Public Criticism of Teachers and Education, Lack of Parental Support, Lack of Administrative Support, and Low Status of the Teaching Profession--would limit English teachers' fulfillment of their need for esteem. The mean need deficiency scores in the area of Esteem for English teachers who attributed very high amounts (mean score: 2.60), high amounts (mean score: 2.05) or moderately high amounts (mean score: 2.32) of burnout to Public Criticism of Teachers and Education were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed small (0.73) or very small (0.91) amounts of burnout to this job-related factor. The mean need deficiency scores in the area of Esteem for English teachers who attributed very high amounts (mean score: 2.67) or high amounts (mean score: 2.36) of burnout to Lack of Parental Support were significantly different at the .01 level (LSD multiple range test) from the mean scores of those teachers who attributed very small amounts (1.12), small amounts (1.22), moderately

Table 17

Mean Scores for Need Deficiency in the Area of Esteem for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Staff Reduction		Isolation in the Classroom		Staff Conflict		Public Criticism		Lack of Parental Support		Lack of Administrative Support	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	47	1.13	80	1.14	62	1.18	25	0.91	23	1.12	55	0.96
Small amount	26	1.00	29	0.95	34	1.19	27	0.73	34	1.22	31	1.18
Moderately small amount	19	1.53	13	1.69	18	1.35	27	1.20	22	0.64	14	1.10
Moderate amount	26	1.71	25	2.00	22	1.29	25	1.15	29	1.31	16	1.42
Moderately high amount	17	1.84	5	2.60	9	2.19	23	2.32	19	1.74	14	2.52
High amount	8	0.96	insuf. no.		10	2.77	13	2.05	25	2.36	14	1.55
Very high amount	20	2.50	8	4.08	9	3.44	24	2.60	13	2.67	19	3.05
Total	163	1.48	160	1.48	164	1.49	164	1.50	165	1.49	163	1.49

Table 17 (Continued)

Mean Scores for Need Deficiency in the Area of Esteem for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Low Status of the Teaching Profession		Lack of Participation in Decision M.		Student Discipline Problems		Lack of Promotional Opportunities		Work Overload and Time Demands		Role Conflict and Role Ambiguity	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	43	0.78	38	0.68	39	1.26	62	1.21	12	0.75	49	1.01
Small amount	25	1.27	35	1.01	37	1.08	21	0.84	16	1.50	28	1.18
Moderately small amount	24	1.06	19	1.40	19	1.54	12	1.14	24	0.90	16	1.13
Moderate amount	39	1.71	33	1.31	26	1.65	28	1.26	33	1.38	46	1.56
Moderately high amount	13	1.62	19	2.42	18	1.26	10	2.57	20	1.43	7	2.57
High amount	12	3.39	12	2.47	18	2.00	16	1.96	30	1.58	13	2.92
Very high amount	8	3.29	9	4.30	8	3.21	16	2.94	29	2.38	insuf. no.	
Total	164	1.50	165	1.49	165	1.49	165	1.49	164	1.50	159	1.44

small amounts (0.64), or moderate amounts (1.31) of burnout to this factor. The mean need deficiency scores in the area of Esteem for English teachers who attributed very high (3.05) or moderately high (2.52) amounts of burnout to Lack of Administrative Support were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed very small (0.96), small (1.18), or moderately small (1.10) amounts of burnout to this job-related factor. The mean need deficiency scores in the area of Esteem for English teachers who attributed very high (mean score: 3.29) or high (3.39) amounts of burnout to Lack of Participation in Decision Making were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed very low (0.78), low (1.27), moderately low (1.06), moderate (1.71), or moderately high (1.62) amounts of burnout to this factor. High F-ratios for analyses of variance of Esteem deficiency by Isolation in the Classroom (F-ratio: 11.69) and by Lack of Participation in Decision Making (F-ratio: 18.95) indicated that these factors also varied closely with need deficiency in the area of Esteem.

Hypothesis 7: The perceived level of need deficiency in the area of Autonomy of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of need deficiency in the area of Autonomy of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of need deficiency in the area of Autonomy by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 12 of 13 job-related variables. Need deficiency in the area of Autonomy of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 2.15$; $p < .05$);

(b) Isolation in the Classroom ($F(5) = 9.05$; $p < .01$);

(c) Staff Conflict ($F(6) = 6.16$; $p < .01$);

(d) Public Criticism of Teachers and Education ($F(6) = 4.65$; $p < .01$);

(e) the Lack of Parental Support ($F(6) = 3.65$; $p < .01$);

(f) the Lack of Administrative Support ($F(6) = 14.61$; $p < .01$);

(g) the Low Status of the Teaching Profession ($F(6) = 9.08$; $p < .01$);

(h) the Lack of Participation in Decision Making ($F(6) = 31.28$; $p < .01$);

(i) Student Discipline Problems ($F(6) = 4.72$; $p < .01$);

(j) the Lack of Promotional Opportunities in Teaching ($F(6) = 6.50$; $p < .01$);

(k) Work Overload and Time Demands ($F(6) = 3.76$; $p < .01$);

(l) Role Conflict and Role Ambiguity ($F(5) = 10.23$; $p < .01$).

Mean need deficiency scores in the area of Autonomy generally increased as the amount of burnout associated with these job-related factors increased. Refer to Table 18 for the mean Autonomy need deficiency scores of the various categories of response for each job-related factor which varied significantly with the dependent variable.

The author had anticipated that the Lack of Participation in Decision Making and Student Discipline Problems would threaten English teachers' need for autonomy. Indeed, the F-ratio for the analysis of variance of need deficiency in the area of Autonomy by the Lack of Participation in Decision Making was very high (31.28). The mean Autonomy deficiency scores of English teachers who attributed a very high (mean score: 3.73), high (2.98), or moderately high (2.75)

Table 18

Mean Scores for Need Deficiency in the Area of Autonomy for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Staff Reduction		Isolation in the Classroom		Staff Conflict		Public Criticism		Lack of Parental Support		Lack of Administrative Support	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	46	1.10	81	1.01	62	1.09	26	0.87	24	1.11	56	0.56
Small amount	26	1.12	30	1.09	35	1.36	27	0.53	34	1.10	31	1.07
Moderately small amount	19	1.22	13	1.52	18	1.28	26	1.38	22	0.78	14	1.68
Moderate amount	27	1.42	24	1.99	22	0.99	25	1.62	28	1.27	16	1.14
Moderately high amount	17	1.59	5	3.00	9	1.86	23	1.92	20	1.60	13	2.46
High amount	9	1.69	insuf. no.		10	2.45	13	1.83	25	2.22	14	2.48
Very high amount	20	2.31	8	3.53	9	3.50	25	2.08	13	2.21	20	2.84
Total	164	1.40	161	1.40	165	1.41	165	1.41	166	1.40	164	1.40

Table 18 (Continued)

Mean Scores for Need Deficiency in the Area of Autonomy for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Low Status of the Teaching Profession		Lack of Participation in Decision M.		Student Discipline Problems		Lack of Promotional Opportunities		Work Overload and Time Demands		Role Conflict and Role Ambiguity	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	42	0.64	39	0.38	41	0.85	60	0.96	12	1.08	49	0.62
Small amount	25	1.19	35	0.61	36	1.07	22	0.78	16	1.17	27	1.01
Moderately small amount	25	1.03	19	1.25	19	1.17	13	1.33	24	0.60	17	1.76
Moderate amount	39	1.74	33	1.54	25	1.57	28	1.29	33	1.26	46	1.61
Moderately high amount	13	1.56	19	2.75	19	1.79	10	2.43	20	1.54	7	2.04
High amount	12	3.19	11	2.98	18	2.44	16	2.13	30	1.56	14	3.07
Very high amount	9	2.61	10	3.73	8	2.50	16	2.63	30	2.26	insuf. no.	
Total	165	2.61	166	1.40	166	1.40	165	1.38	165	1.41	160	1.37

amount of burnout to the Lack of Participation in Decision Making were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed a very small (0.38), small (0.61), moderately small (1.25) or moderate (1.54) amount of burnout to this factor. Also, the mean Autonomy deficiency scores of English teachers who attributed a high (2.44) or very high (2.50) amount of burnout to Student Discipline Problems were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed a very small (0.85) or small (1.07) amount of burnout to this factor. High F-ratios for the analyses of variance of need deficiency in the area of Autonomy by Isolation in the Classroom (9.05), by the Lack of Administrative Support (14.61), and by Role Conflict and Role Ambiguity (10.23) suggested that these factors might also have restricted teachers' fulfillment of autonomy needs.

Hypothesis 8: The perceived level of need deficiency in the area of Self-actualization of English teachers increases with the amount of burnout they attribute to the job-related factors. In order to test the hypothesis that the perceived level of need deficiency in the area of Self-actualization of English teachers increased with the amount of burnout they attributed to the job-related factors, oneway analyses of variance of need deficiency

in the area of Self-actualization by the job-related factors associated with burnout were run. The analyses produced significant F-ratios for 12 of 13 job-related variables. Need deficiency in the area of Self-actualization of English teachers in Saskatchewan varied significantly with the amount of burnout they attributed to:

(a) Staff Reduction ($F(6) = 3.97$; $p < .01$);

(b) Isolation in the Classroom ($F(5) = 9.42$; $p < .01$);

(c) Staff Conflict ($F(6) = 6.72$; $p < .01$);

(d) Public Criticism of Teachers and Education ($F(6) = 6.44$; $p < .01$);

(e) the Lack of Parental Support ($F(6) = 5.07$; $p < .01$);

(f) the Lack of Administrative Support ($F(6) = 10.12$; $p < .01$);

(g) the Low Status of the Teaching Profession ($F(6) = 11.62$; $p < .01$);

(h) the Lack of Participation in Decision Making ($F(6) = 16.42$; $p < .01$);

(i) Student Discipline Problems ($F(6) = 5.82$; $p < .01$);

(j) the Lack of Promotional Opportunities in Teaching ($F(6) = 9.97$; $p < .01$);

(k) Work Overload and Time Demands ($F(6) = 6.42$; $p < .01$);

(1) Role Conflict and Role Ambiguity ($F(5) = 11.15$; $p < .01$).

Mean scores for need deficiency in the area of Self-actualization generally increased as the amount of burnout attributed to the job-related factors increased. Refer to Table 19 for the mean Self-actualization need deficiency scores of the various categories of response for each job-related variable which varied significantly with the dependent variable.

In the theoretical construct for this study, the author speculated that the Lack of Promotional Opportunities in Teaching, Work Overload and Time Demands, and Role Conflict and Role Ambiguity would threaten teachers' need for self-actualization. The analyses supported this speculation. Need deficiency mean scores in the area of Self-actualization for English teachers who attributed either a very high amount (3.38) or a high amount (2.79) of burnout to the Lack of Promotional Opportunities in Teaching were significantly different at the .010 level (LSD multiple range test) from the mean scores of those who attributed a very small (1.31), small (1.13), moderately small (1.18), or moderate (1.54) amount of burnout to this factor. The need deficiency mean score in the area of Self-actualization for the English teachers who attributed a very high amount (2.96) of burnout to Work Overload and Time

Table 19

Mean Scores for Need Deficiency in the Area of Self-actualization for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Staff Reduction		Isolation in the Classroom		Staff Conflict		Public Criticism		Lack of Parental Support		Lack of Administrative Support	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	47	1.38	82	1.34	64	1.30	25	1.27	23	1.09	57	1.16
Small amount	27	1.47	30	1.24	34	1.65	27	0.88	35	1.51	32	1.16
Moderately small amount	20	1.48	13	2.33	19	1.65	28	1.60	23	1.09	14	1.88
Moderate amount	27	1.81	25	2.23	22	1.47	26	1.46	29	1.54	16	1.71
Moderately high amount	17	1.57	5	3.20	9	2.30	23	2.19	20	2.17	14	2.64
High amount	8	1.67	insuf. no.		10	3.23	13	2.31	25	2.37	14	1.98
Very high amount	20	3.00	8	3.75	9	3.44	25	2.76	13	2.85	19	3.32
Total	166	1.71	163	1.71	167	1.72	167	1.72	168	1.71	166	1.71

Table 19 (Continued)

Mean Scores for Need Deficiency in the Area of Self-actualization for the Categories of Response of the Independent Job-Related Variables

Amount of Burnout Attributed to the Variable	Low Status of the Teaching Profession		Lack of Participation in Decision M.		Student Discipline Problems		Lack of Promotional Opportunities		Work Overload and Time Demands		Role Conflict and Role Ambiguity	
	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean	Count	Mean
Very small amount	43	1.02	39	0.79	41	1.13	62	1.31	12	1.19	51	1.01
Small amount	25	1.43	37	1.26	38	1.24	23	1.13	16	1.42	28	1.40
Moderately small amount	25	1.31	19	1.82	19	1.63	13	1.18	25	1.20	17	1.59
Moderate amount	40	1.77	33	1.75	26	2.17	28	1.54	34	1.36	46	1.82
Moderately high amount	13	2.18	19	2.56	18	2.09	10	2.30	20	1.90	7	3.43
High amount	12	3.42	12	2.50	18	2.37	16	2.79	30	1.58	13	3.31
Very high amount	9	3.67	9	4.33	8	3.29	16	3.38	30	2.96	insuf. no.	
Total	167	1.71	168	1.71	168	1.71	168	1.71	167	1.72	162	1.66

Demands was significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed a very small (1.94), small (1.42), moderately small (1.20), moderate (1.36), moderately high (1.90), or high (1.58) amount of burnout to this factor. The need deficiency mean scores in the area of Self-actualization for English teachers who attributed a high (3.31) or moderately high (3.43) amount of burnout to Role Conflict and Role Ambiguity were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who attributed a very small (1.01), small (1.40), moderately small (1.59), or moderate (1.81) amount of burnout to this independent variable. F-ratios for the analyses of variance of need deficiency in the area of Self-actualization by Isolation in the Classroom (9.42), by the Lack of Administrative Support (10.12), by the Low Status of the Teaching Profession (11.62), and by the Lack of Participation in Decision Making (16.42) were also high, suggesting that these factors might also inhibit English teachers' fulfillment of their need for self-actualization.

Summary of the tests of hypotheses involving the level of needs deficiency in relation to the job-related factors. All the hypotheses (4, 5, 6, 7, and 8) involving the level of needs deficiency in relation to

the job-related factors associated with burnout were substantiated by the data. Most of the job-related factors varied closely with the needs deficiency variables. Need deficiency mean scores generally increased as the amount of burnout English teachers attributed to the various job-related factors increased. The F-ratios for the analyses of variance of needs deficiency in all five areas--Security, Affiliation, Esteem, Autonomy, and Self-actualization--by Isolation in the Classroom, Lack of Administrative Support, Low Status of the Teaching Profession, Lack of Participation in Decision Making, and Role Conflict and Role Ambiguity were consistently high. Refer to Table 20 for the F-ratios of significant oneway analyses of variance with the dependent needs deficiency variables and the independent job-related variables.

The Level of Burnout in Relation to the Level of Needs Deficiency of English Teachers

The main purpose of this study was to examine the relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan.

Tests of Hypotheses Involving the Level of Burnout in Relation to the Level of Needs Deficiency

Oneway analyses of variance with three dependent

Table 20

F-ratios of Significant Oneway Analyses of Variance with Dependent Needs Deficiency Variables and Independent Job-Related Variables

Job-Related Variables	Need Deficiency in the Area of Secur.	Affil.	Esteem	Auton.	Self-ac.
Staff Reduction	°5.25	°4.91	°3.72	2.15	°3.97
Involuntary Transfer	°5.22	°3.81	insig.	insig.	insig.
Isolation in the Classroom	*7.69	*8.30	*11.69	*9.05	*9.42
Staff Conflict	*5.53	*14.91	*6.78	*6.16	*6.72
Public Criticism	2.31	°4.98	*8.71	°4.65	*6.44
Lack of Parental Support	2.47	*5.69	*6.24	°3.65	°5.07
Lack of Administrative Support	*5.98	*7.02	*9.21	*14.61	*10.12
Low Status of the Teaching Profession	°4.73	*7.16	*11.86	*9.08	*11.62
Lack of Participation in Decision Making	°4.39	*6.13	*18.95	*31.28	*16.42
Student Discipline Problems	2.18	*5.34	°3.62	°4.72	*5.82
Lack of Promotional Opportunities	insig.	2.43	*6.82	*6.50	*9.97
Work Overload and Time Demands	insig.	2.30	°3.62	°3.75	*6.42
Role Conflict and Role Ambiguity	2.38	*10.97	*6.12	*10.23	*11.15

no mark: $p < .05$ °: $p < .01$ *: $p = 0.00$

burnout variables (Emotional Exhaustion, Depersonalization, and Personal Accomplishment) and five independent needs deficiency variables (Security, Affiliation, Esteem, Autonomy, and Self-actualization) were run to test 15 hypotheses. The decision rule in accepting each hypothesis was set at the .05 level of significance. Because need deficiency scores in each area were computed from two or more questionnaire items, these scores were rounded off to the nearest whole number to make categorization possible: scores of 0 to .49 were coded as 0; scores of .50 to 1.49 were coded as 1.00; scores of 1.50 to 2.49 were coded as 2.00; etc.

Hypothesis 9: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Security. In order to test the hypothesis that the perceived level of Emotional Exhaustion of English teachers increased with their perceived level of need deficiency in the area of Security, oneway analysis of variance of Emotional Exhaustion by need deficiency in the area of Security was run. The oneway analysis produced an F-ratio of 2.57 ($p < .05$), indicating that the perceived level of Emotional Exhaustion of English teachers in Saskatchewan varied with their perceived degree of need deficiency in the area of Security. As hypothesized, the Emotional Exhaustion mean scores generally increased

as the need deficiency scores increased. The mean Emotional Exhaustion score of English teachers who had recorded a Security need deficiency of 3.00 (2.41) was significantly different at the .01 level (using the LSD multiple range test) from the mean Emotional Exhaustion score of those whose Security need deficiency was 0.00 (1.67). Refer to Table 21.

Table 21

Analysis of Variance, Mean Scores, and Standard Deviations for Emotional Exhaustion by Need Deficiency in the Area of Security

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	5	13.89	2.78	2.57	0.03
Within Groups	153	165.49	1.08		
Total	158	179.38			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	86	1.67	1.04
1	1	26	1.65	0.84
2	2	18	2.05	0.97
3	3	17	2.41	1.35
4	4	6	1.72	1.08
5	5	6	2.67	1.08
Total		159	1.83	1.07

Hypothesis 10: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Affiliation. In order to test the hypothesis that the perceived level of Emotional Exhaustion of English teachers increased with their perceived level of need deficiency in the area of Affiliation, oneway analysis of Emotional Exhaustion by need deficiency in the area of Affiliation was run. The oneway analysis produced an F-ratio of 6.58 ($p < .01$), which indicated that the perceived level of Emotional Exhaustion of English teachers varied with their perceived level of need deficiency in the area of Affiliation. As hypothesized, the Emotional Exhaustion mean scores increased as the Affiliation need deficiency scores increased. The mean Emotional Exhaustion scores of English teachers who had recorded a need deficiency in the area of Affiliation of 3.00 (2.33), 2.00 (2.30), or 1.00 (2.01) were significantly different at the .01 level (LSD multiple range test) from the mean Emotional Exhaustion score (1.44) of those whose Affiliation need deficiency was 0.00. Refer to Table 22.

Hypothesis 11: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Esteem. In order to test the hypothesis that the

Table 22

Analysis of Variance, Mean Scores, and Standard Deviations for Emotional Exhaustion by Need Deficiency in the Area of Affiliation

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	3	19.93	6.65	6.58	0.00
Within Groups	155	156.47	1.01		
Total	158	176.41			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	67	1.44	0.94
1	1	50	2.01	1.03
2	2	26	2.23	1.10
3	3	16	2.33	1.01
Total		159	1.84	1.06

perceived level of Emotional Exhaustion of English teachers increased with their perceived level of need deficiency in the area of Esteem, oneway analysis of Emotional Exhaustion by need deficiency in the area of Esteem was run. The oneway analysis produced an F-ratio of 9.95 ($p < .01$), indicating that the perceived level of Emotional Exhaustion of English teachers varied with their perceived level of need deficiency in the area of Esteem. As hypothesized, the Emotional Exhaustion

mean scores increased as the Esteem need deficiency scores increased. The mean Emotional Exhaustion scores of English teachers who had recorded a need deficiency in the area of Esteem of 3.00 (2.56) or 4.00 (2.94) were significantly different at the .01 level (LSD multiple range test) from the mean Emotional Exhaustion scores of those whose Esteem need deficiency was 0.00 (1.42), 1.00 (1.61), or 2.00 (1.83). Refer to Table 23.

Table 23

Analysis of Variance, Mean Scores, and Standard Deviations for Emotional Exhaustion by Need Deficiency in the Area of Esteem

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	4	33.92	8.48	9.95	0.00
Within Groups	154	131.21	0.85		
Total	158	165.13			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	45	1.42	0.96
1	1	54	1.61	0.92
2	2	31	1.83	0.81
3	3	17	2.56	1.03
4	4	12	2.94	0.95
Total		159	1.80	1.02

Hypothesis 12: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Autonomy. In order to test the hypothesis that the perceived level of Emotional Exhaustion of English teachers increased with their perceived level of need deficiency in the area of Autonomy, oneway analysis of Emotional Exhaustion by need deficiency in the area of Autonomy was run. The F-ratio of this oneway analysis was 7.49 ($p < .01$), which indicated that the perceived level of Emotional Exhaustion of English teachers varied with their perceived level of need deficiency in this area. As hypothesized, the Emotional Exhaustion mean scores increased as the Autonomy need deficiency scores increased. The mean Emotional Exhaustion scores of English teachers who had recorded a need deficiency in the area of Autonomy of 5.00 (2.49), 4.00 (3.07), 3.00 (2.36), or 2.00 (2.07) were significantly different at the .01 level (LSD multiple range test) from the mean Emotional Exhaustion score of those whose need deficiency in this area was 0.00 (1.34). Moreover, the mean Emotional Exhaustion scores of those teachers who had recorded a need deficiency of 3.00 or 4.00 were significantly different at the .01 level (LSD multiple range test) from the mean Emotional Exhaustion score of those whose need deficiency in the area of

Autonomy was 1.00 (1.71). Refer to Table 24.

Table 24

Analysis of Variance, Mean Scores, and Standard Deviations for Emotional Exhaustion by Need Deficiency in the Area of Autonomy

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	5	35.35	7.07	7.49	0.00
Within Groups	156	147.34	0.94		
Total	161	182.69			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	47	1.34	0.88
1	1	48	1.71	0.91
2	2	30	2.07	1.07
3	3	22	2.36	1.03
4	4	8	3.07	1.17
5	5	7	2.49	1.16
Total		162	1.86	1.07

Hypothesis 13: The perceived level of Emotional Exhaustion of English teachers increases with their perceived level of need deficiency in the area of Self-actualization. In order to test the hypothesis

that the perceived level of Emotional Exhaustion of English teachers increased with their perceived level of need deficiency in the area of Self-actualization, oneway analysis of Emotional Exhaustion by need deficiency in the area of Self-actualization was run. The oneway analysis produced an F-ratio of 20.85 ($p < .01$), indicating that the perceived level of Emotional Exhaustion of English teachers varied with their perceived level of need deficiency in this area. As hypothesized, mean scores for Emotional Exhaustion increased as the mean scores for need deficiency in the area of Self-actualization increased. The mean Emotional Exhaustion scores of English teachers who had recorded a need deficiency in the area of Self-actualization of 3.00 (2.32) or 4.00 (3.47) were significantly different at the .01 level (LSD multiple range test) from the mean scores of those whose need deficiency in this area was 0.00 (1.26), 1.00 (1.60), or 2.00 (1.70); the mean Emotional Exhaustion score of those who had recorded a need deficiency of 3.00 was significantly different at the .01 level (LSD multiple range test) from the mean score of those whose need deficiency in this area was 4.00. Refer to Table 25.

Hypothesis 14: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of

Table 25

Analysis of Variance, Mean Scores, and Standard Deviations for Emotional Exhaustion by Need Deficiency in the Area of Self-actualization

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	4	59.90	14.98	20.85	0.00
Within Groups	156	112.05	0.72		
Total	160	171.95			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	42	1.26	0.84
1	1	42	1.60	0.91
2	2	38	1.70	0.78
3	3	25	2.32	0.61
4	4	14	3.47	1.18
Total		161	1.81	1.04

Security. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with their perceived level of need deficiency in the area of Security, oneway analysis of Depersonalization by need deficiency in the area of Security was run. The F-ratio of this oneway analysis was insignificant, which indicated that the perceived level of Depersonalization

did not vary with the perceived level of need deficiency in the area of Security. The data did not substantiate Hypothesis 14.

Hypothesis 15: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Affiliation. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with their perceived level of need deficiency in the area of Affiliation, oneway analysis of Depersonalization by need deficiency in this area was run. The F-ratio of this oneway analysis was 3.88 ($p < .01$), which indicated that the perceived level of Depersonalization of English teachers varied with their perceived level of need deficiency in the area of Affiliation. As hypothesized, the Depersonalization mean scores increased as the Affiliation need deficiency scores increased. The mean Depersonalization score of English teachers who had recorded a need deficiency in the area of Affiliation of 2.00 (1.63) was significantly different at the .01 level (LSD multiple range test) from the mean Depersonalization scores of those whose need deficiency was 0.00 (1.05) or 1.00 (0.98). Refer to Table 26.

Table 26

Analysis of Variance, Mean Scores, and Standard Deviations for Depersonalization by Need Deficiency in the Area of Affiliation

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	3	8.85	2.95	3.88	0.01
Within Groups	156	118.60	0.76		
Total	159	127.46			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	67	1.05	0.93
1	1	50	0.98	0.70
2	2	26	1.63	1.01
3	3	17	1.35	0.89
Total		160	1.15	0.90

Hypothesis 16: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Esteem. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with their perceived level of need deficiency in the area of Esteem, oneway analysis of Depersonalization by need deficiency in this area was run. The F-ratio

for this oneway analysis was 5.31 ($p < .01$), indicating that the perceived level of Depersonalization of English teachers varied with their perceived level of need deficiency in this area. As hypothesized, the Depersonalization mean scores increased as the Esteem need deficiency scores increased. The mean Depersonalization score of English teachers who had recorded a need deficiency in the area of Esteem of 4.00 (1.95) was significantly different at the .01 level (LSD multiple range test) from the mean scores of those whose need deficiency in this area was 1.00 (0.93) or 0.00 (0.93). Refer to Table 27.

Hypothesis 17: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Autonomy. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with their perceived level of need deficiency in the area of Autonomy, oneway analysis of Depersonalization by need deficiency in this area was run. The oneway analysis produced an F-ratio of 4.75 ($p < .01$), which indicated that the perceived level of Depersonalization of English teachers varied with their perceived level of need deficiency in the area of Autonomy. As hypothesized, the mean scores for Depersonalization generally increased with the mean scores for need deficiency in the area of

Table 27

Analysis of Variance, Mean Scores, and Standard Deviations for Depersonalization by Need Deficiency in the Area of Esteem

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	4	14.25	3.56	5.31	0.00
Within Groups	154	103.36	0.67		
Total	158	117.61			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	45	0.93	0.85
1	1	53	0.93	0.74
2	2	31	1.26	0.87
3	3	18	1.44	0.73
4	4	12	1.95	1.01
Total		159	1.13	0.86

Autonomy increased. The mean Depersonalization scores of English teachers who had recorded a need deficiency in the area of Autonomy of 3.00 (1.66) or 4.00 (2.03) were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who recorded a need deficiency in this area of 0.00 (0.89) or 1.00 (0.98). Refer to Table 28.

Table 28

Analysis of Variance, Mean Scores, and Standard Deviations for Depersonalization by Need Deficiency in the Area of Autonomy

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	5	16.99	3.40	4.75	0.00
Within Groups	157	112.22	0.71		
Total	162	129.21			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	47	0.89	0.88
1	1	48	0.98	0.72
2	2	30	1.17	0.77
3	3	23	1.66	1.00
4	4	8	2.03	1.14
5	5	7	1.34	0.77
Total		163	1.15	0.89

Hypothesis 18: The perceived level of Depersonalization of English teachers increases with their perceived level of need deficiency in the area of Self-actualization. In order to test the hypothesis that the perceived level of Depersonalization of English teachers increased with their perceived level of need deficiency in the area of Self-actualization, oneway analysis of Depersonalization

by need deficiency in this area was run. The F-ratio of this oneway analysis was 8.05 ($p < .01$), which indicated that the perceived level of Depersonalization of English teachers varied with their perceived level of need deficiency in the area of Self-actualization. As hypothesized, mean scores for Depersonalization increased with the mean scores for need deficiency in the area of Self-actualization. The mean Depersonalization scores of teachers who had recorded a need deficiency in the area of Self-actualization of 3.00 (1.52) or 4.00 (1.93) were significantly different at the .01 level (LSD multiple range test) from the mean scores of those who had recorded a need deficiency in this area of 0.00 (0.74) or 1.00 (1.00); the mean Depersonalization score of those who had recorded a need deficiency in the area of Self-actualization of 4.00 was significantly different at the .01 level (LSD multiple range test) from the mean score of the English teachers who had recorded a need deficiency of 2.00 (1.06). Refer to Table 29.

Hypothesis 19: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Security increases. In order to test the hypothesis that the perceived level of Personal Accomplishment of English teachers decreased as their perceived level of need deficiency in the area of Security increased, oneway analysis of Personal Accomplishment by need deficiency

Table 29

Analysis of Variance, Mean Scores, and Standard Deviations for Depersonalization by Need Deficiency in the Area of Self-actualization

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	4	20.02	5.01	8.05	0.00
Within Groups	157	97.65	0.62		
Total	161	117.67			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	42	0.74	0.70
1	1	41	1.00	0.84
2	2	39	1.06	0.66
3	3	26	1.52	0.82
4	4	14	1.93	1.11
Total		162	1.11	0.85

in this area was run. The F-ratio of this oneway analysis was insignificant, indicating that the perceived level of Personal Accomplishment did not vary with the perceived level of need deficiency in the area of Security. The data did not substantiate Hypothesis 19.

Hypothesis 20: The perceived level of Personal Accomplishment of English teachers decreases as their

perceived level of need deficiency in the area of Affiliation increases. In order to test the hypothesis that the perceived level of Personal Accomplishment of English teachers decreased as their perceived level of need deficiency in the area of Affiliation increased, oneway analysis of Personal Accomplishment by need deficiency in this area was run. The oneway analysis did not produce a significant F-ratio, which indicated that the perceived level of Personal Accomplishment did not vary with the perceived level of need deficiency in the area of Affiliation. The data did not substantiate Hypothesis 20.

Hypothesis 21: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Esteem increases. In order to test the hypothesis that the perceived level of Personal Accomplishment of English teachers decreased as their perceived level of need deficiency in the area of Esteem increased, oneway analysis of Personal Accomplishment by need deficiency in this area was run. The F-ratio of this analysis was insignificant, indicating that the perceived level of Personal Accomplishment did not vary with the perceived level of need deficiency in the area of Esteem. The data did not substantiate Hypothesis 21.

Hypothesis 22: The perceived level of Personal Accomplishment of English teachers decreases as their

perceived level of need deficiency in the area of Autonomy increases. In order to test the hypothesis that the perceived level of Personal Accomplishment of English teachers decreased as their perceived level of need deficiency in the area of Autonomy increased, oneway analysis of Personal Accomplishment by need deficiency in this area was run. The oneway analysis did not produce a significant F-ratio, indicating that the perceived level of Personal Accomplishment did not vary with the perceived level of need deficiency in the area of Autonomy. The data did not substantiate Hypothesis 22.

Hypothesis 23: The perceived level of Personal Accomplishment of English teachers decreases as their perceived level of need deficiency in the area of Self-actualization increases. In order to test the hypothesis that the perceived level of Personal Accomplishment of English teachers decreased as their perceived level of need deficiency in the area of Self-actualization increased, oneway analysis of Personal Accomplishment by need deficiency in the area of Self-actualization was run. The F-ratio of this oneway analysis was 4.86 ($p < .01$), indicating that the perceived level of Personal Accomplishment of English teachers varied with their perceived level of need deficiency in this area. As hypothesized, the Personal Accomplishment mean scores

generally decreased as the Self-actualization need deficiency scores increased. The mean Personal Accomplishment scores of English teachers who had recorded a need deficiency in the area of Self-actualization of 2.00 (4.23) or 3.00 (4.23) were significantly different at the .01 level (LSD multiple range test) from the mean score of those whose need deficiency was 0.00 (4.96). Refer to Table 30.

Table 30

Analysis of Variance, Mean Scores, and Standard Deviations for Personal Accomplishment by Need Deficiency in the Area of Self-actualization

Source	Degrees of Freedom	Sum of Squares	Mean Squares	F-ratio	F-prob.
Between Groups	4	12.81	3.20	4.86	0.00
Within Groups	148	97.57	0.66		
Total	152	110.38			

Group	Need Deficiency Score	Count	Mean	Std. Dev.
0	0	36	4.96	0.78
1	1	41	4.62	0.84
2	2	36	4.23	0.81
3	3	26	4.23	0.90
4	4	14	4.60	0.59
Total		153	4.54	0.85

Summary of the tests of hypotheses involving the level of burnout in relation to the level of needs deficiency. All five of the hypotheses (Hypotheses 9, 10, 11, 12, and 13) involving the perceived level of Emotional Exhaustion in relation to the perceived level of needs deficiency were substantiated by the data. Emotional Exhaustion varied significantly with need deficiency in the areas of Security, Affiliation, Esteem, Autonomy, and Self-actualization. Four of the five hypotheses (Hypotheses 15, 16, 17, and 18) involving the perceived level of Depersonalization in relation to the perceived level of needs deficiency were substantiated by the data. Depersonalization varied significantly with need deficiency in the areas of Affiliation, Esteem, Autonomy, and Self-actualization. Only one of the five hypotheses (Hypothesis 23) involving the perceived level of Personal Accomplishment in relation to the perceived level of needs deficiency was substantiated by the data. Personal Accomplishment varied significantly with need deficiency in the area of Self-actualization.

F-ratios were highest for the analyses of variance of Emotional Exhaustion by need deficiency in the areas of Esteem (9.95), Autonomy (7.49), and Self-actualization (20.85), and for Depersonalization by need deficiency in the area of Self-actualization (8.05). F-ratios were also high for the analyses of variance of Emotional

Exhaustion by need deficiency in the area of Affiliation (6.58), for Depersonalization by need deficiency in the areas of Esteem (5.31) and Autonomy (4.75), and for Personal Accomplishment by need deficiency in the area of Self-actualization (4.86). The probability of the chance occurrence of these F-ratios was less than .01. The probability of the chance occurrence of the F-ratios of the analyses of variance of Emotional Exhaustion by need deficiency in the area of Security, and of Depersonalization by need deficiency in the area of Affiliation, was less than .05. As one moves towards the bottom left of Table 31, the F-ratios increase: need deficiency in the higher level need areas--Self-actualization, Autonomy, and Esteem--varied more closely with the burnout subscales than did need deficiency in the lower level need areas; moreover, Emotional Exhaustion varied more closely with the need deficiency variables than either Depersonalization or Personal Accomplishment, and both Emotional Exhaustion and Depersonalization varied more closely with the need deficiency variables than Personal Accomplishment. Refer to Table 31.

Table 31

F-ratios for the Analyses of Variance of the Dependent Burnout Variables by the Independent Needs Deficiency Variables

Area of Need Deficiency	Burnout Subscale		
	Emotional Exhaustion	Depersonali-zation	Personal Accomplishment
Security	°2.57	insig.	insig.
Affiliation	*6.58	°3.88	insig.
Esteem	*9.95	*5.31	insig.
Autonomy	*7.49	*4.75	insig.
Self-actualization	*20.85	*8.05	*4.86

°: $p < .05$

*: $p < .01$

Thus, the relationship between perceived Emotional Exhaustion and perceived need deficiency in the area of Self-actualization was very strong; the relationships between perceived Emotional Exhaustion and perceived need deficiency in the areas of Esteem and Autonomy, and between perceived Depersonalization and need deficiency in the area of Self-actualization were also strong; the relationships between perceived Emotional Exhaustion and perceived need deficiency in the area of Affiliation, between Depersonalization and perceived need deficiency in the areas of Esteem and Autonomy, and between Personal Accomplishment and need deficiency in the area of Self-actualization were moderately strong; the relationships between perceived Emotional Exhaustion and need deficiency in the area of Security, and between perceived Depersonalization and perceived need deficiency in the area of Affiliation were significant; the relationships between Depersonalization and need deficiency in the area of Security, and between Personal Accomplishment and needs deficiency in the areas of Autonomy, Esteem, Affiliation, and Security were insignificant.

Multiple Regression Analyses

Stepwise multiple regression analysis was used (a) to gain a composite picture of the relationship of the needs deficiency variables and the job-related

factors to the burnout of English teachers while controlling for the background variables;

(b) to determine how well teacher burnout could be predicted from the needs deficiency and job-related variables by choosing the combination of independent variables which produced the highest F-ratio.

Multiple regression analysis permits one to examine the relationship between a dependent variable and two or more independent variables. The multiple correlation (R) expresses the relationship between the dependent variable--Emotional Exhaustion, Depersonalization, or Personal Accomplishment--and the best combination of independent needs deficiency and job-related variables. R^2 expresses the percentage of the variance of the dependent variable accounted for by the combination of independent variables (cf. Kerlinger, 1979, pp. 166 - 172).

Multiple Regression Analysis on the Dependent Variable Emotional Exhaustion

Multiple regression analysis with block entry was used to determine the percentage of variance of Emotional Exhaustion accounted for by separate blocks of background, needs deficiency, and job-related variables. When all the background variables were entered in a block at

the first step, the multiple R was 0.295 and the R square was 0.087: the background variables accounted for 8.7% of the variance of Emotional Exhaustion. When the job-related variables were entered in a block at the second step, the multiple R became 0.765 (an increase of 0.470) and the R square 0.585: the job-related variables accounted for an increase of 49.8 % in the percentage of the variance of Emotional Exhaustion. The percentage of the variance of Emotional Exhaustion accounted for by the background and job-related variables combined was 58.5 %. When the needs deficiency variables were entered in a block at the third step, the multiple R became 0.796 (an increase of .031) and the R square 0.634: the needs deficiency variables accounted for an increase of 4.9% in the percentage of variance of Emotional Exhaustion. The background, job-related, and needs deficiency variables combined accounted for 63.4% of the variance of Emotional Exhaustion. Refer to Table 32.

Stepwise multiple regression analysis with individual entry was used to examine the impact of individual needs deficiency and job-related variables. After the background variables were entered at the first step (R^2: .087), the needs deficiency and job-related variables were entered at succeeding steps, beginning with need deficiency in the area of Self-actualization (R^2: 0.390) and then

Table 32

Stepwise Multiple Regression Analysis on Emotional Exhaustion with a Block Entry of Independent Variables

Step	Block of Variables Entered	R	R^2	Increase in R^2	F	Signif. F
1	Background variables	0.295	0.087	-------	0.806	0.65
2	Job-related variables	0.765	0.585	0.498	5.266	0.00
3	Needs Deficiency variables	0.796	0.634	0.049	5.139	0.00

the three job-related factors presumed to threaten the fulfillment of this need--Role Conflict and Role Ambiguity (R^2: 0.436), Work Overload and Time Demands (R^2: 0.489), and the Lack of Promotional Opportunities in Teaching (R^2: 0.514)-- and continuing with need deficiency in the areas of Autonomy, Esteem, Affiliation, and Security, and the job-related factors associated with these areas. The largest increases in the percentage of variance of of Emotional Exhaustion were accounted for by:

(a) need deficiency in the area of Self-actualization (30.3% increase);

(b) Role Conflict and Role Ambiguity (4.6 % increase);

(c) Work Overload and Time Demands (5.3 % increase);

(d) the Lack of Promotional Opportunities in Teaching

(2.5 % increase);

(e) Student Discipline Problems (6.3 % increase);

(f) Public Criticism of Teachers and Education (1.3 % increase). Refer to Table 33.

Table 33

Stepwise Multiple Regression Analysis on Emotional Exhaustion with Individual Entry of the Independent Variables

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
1	Background Variables	.295	.087	------	0.806	(0.65)
2	Self-actualization	.625	.390	.303	4.979	(0.00)
3	Role Conflict and Role Ambig.	.660	.436	.046	5.560	(0.00)
4	Work Overload & Time Demands	.699	.489	.053	6.403	(0.00)
5	Lack of Promotional Opportun.	.717	.514	.025	6.605	(0.00)
6	Autonomy	.720	.518	.004	6.279	(0.00)
7	Student Discipline Problems	.763	.582	.063	7.609	(0.00)
8	Lack of Participation in DM	.763	.582	.000	7.168	(0.00)
9	Esteem	.768	.590	.008	6.99	(0.00)
10	Low Status of the Teaching Profession	.769	.591	.001	6.62	(0.00)

Table 33 (Continued)

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
11	Lack of Admin. Support	.774	.599	.008	6.495	(0.00)
12	Lack of Parental Support	.774	.599	.000	6.165	(0.00)
13	Public Criticism	.782	.612	.013	6.185	(0.00)
14	Affiliation	.787	.620	.008	6.081	(0.00)
15	Staff Conflict	.789	.622	.002	5.850	(0.00)
16	Isolation in the Classroom	.790	.625	.003	5.64	(0.00)
17	Security	.791	.626	.001	5.415	(0.00)
18	Involuntary Transfer	.791	.626	.000	5.195	(0.00)
19	Staff Reduction	.796	.634	.008	5.139	(0.00)

After all the variables had been entered, backward deletion of variables was used to give a regression equation with the best combination of the least number of variables yielding the highest F-ratio. The final regression equation had a multiple R of 0.766, an R square of 0.586 , and an F-ratio of 17.945 (Signif. F = 0.00). With the constant and the beta weights, the final equation read: Emotional Exhaustion = -0.463 + 0.295 (Student Discipline Problems) + 0.243 (Need deficiency in the area of Self-actualization) + 0.188

(Work Overload and Time Demands) + 0.176 (Lack of Promotional Opportunities in Teaching) + 0.144 (Marital Status) + 0.142 (Public Criticism of Teachers and Education) + 0.133 (Role Conflict and Role Ambiguity) + 0.111 (Percentage of Teaching Time in the area of English) + (-0.155) (Membership in SETA). Of the variables in this study, these were the best predictors of Emotional Exhaustion.

Multiple Regression Analysis on the Dependent Variable Depersonalization

Multiple regression analysis with block entry was used to determine the percentage of variance of Depersonalization accounted for by separate blocks of background, needs deficiency, and job-related variables. With the entry of the block of background variables at the first step, the multiple R was 0.379 and the R square was 0.144 (ie., the background variables accounted for 14.4% of the variance of Depersonalization). With the entry of the job-related variables in a block at the second step, the multiple R became 0.688 (an increase of 0.544) and the R square 0.473 (an increase of 32.9% in the percentage of variance of Depersonalization). The percentage of variance of Depersonalization accounted for by the background and job-related variables combined was 47.3%. With the

entry of the needs deficiency variables in a block at the third step, the multiple R became 0.749 (a further increase of .061) and the R square 0.561 (the needs deficiency variables accounted for an increase of 8.7% in the percentage of variance of Depersonalization). The background, job-related, and needs deficiency variables combined accounted for 56.1% of the variance of Depersonalization. Refer to Table 34.

Table 34

Stepwise Multiple Regression Analysis on Depersonalization with a Block Entry of Independent Variables

Step	Block of Variables Entered	R	R^2	Increase in R^2	F	Signif. F
1	Background variables	0.379	0.144	-------	1.423	0.16
2	Job-related variables	0.688	0.473	0.329	3.353	0.00
3	Needs Deficiency variables	0.74	0.561	0.087	3.787	0.00

The impact of individual needs deficiency and job-related variables on Depersonalization was examined using stepwise multiple regression analysis with individual entry. After the background variables were entered at the first step (R^2: 0.144), the needs deficiency and job-related variables were entered at succeeding steps.

The largest increases in the percentage of variance of Depersonalization were accounted for by:

(a) need deficiency in the area of Self-actualization (16.9% increase);

(b) Student Discipline Problems (8.7% increase);

(c) Public Criticism of Teachers and Education (2.8% increase);

(d) need deficiency in the area of Affiliation (2.8% increase);

(e) Involuntary Transfer (2.8% increase);

(f) Staff Reduction (2.9% increase). Refer to Table 35.

Table 35

Stepwise Multiple Regression Analysis on Depersonalization with Individual Entry of the Independent Variables

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
1	Background Variables	.379	.144	-----	1.423	(0.16)
2	Self-actualization	.559	.313	.169	3.539	(0.00)
3	Role Conflict and Role Ambig.	.56	.318	.006	3.358	(.00)
4	Work Overload & Time Demands	.564	.318	.000	3.124	(.00)
5	Lack of Promotional Opportun.	.568	.322	.004	2.967	(.00)
6	Autonomy	.572	.327	.005	2.838	(.00)

Table 35 (Continued)

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
7	Student Discipline Problems	.643	.414	.087	3.86	(0.00)
8	Lack of Participation in DM	.645	.417	.003	3.68	(0.00)
9	Esteem	.646	.417	.000	3.472	(0.00)
10	Low Status of the Teaching Profession	.649	.421	.004	3.333	(0.00)
11	Lack of Admin. Support	.658	.432	.011	3.313	(0.00)
12	Lack of Parental Support	.661	.436	.004	3.196	(0.00)
13	Public Criticism	.682	.465	.029	3.401	(0.00)
14	Affiliation	.702	.492	.027	3.620	(0.00)
15	Staff Conflict	.703	.493	.001	3.468	(0.00)
16	Isolation in the Classroom	.709	.503	.010	3.435	(0.00)
17	Security	.710	.504	.001	3.287	(0.00)
18	Involuntary Transfer	.729	.532	.028	3.52	(0.00)
19	Staff Reduction	.749	.561	.029	3.78	(0.00)

After all independent variables had been entered, backward deletion of variables was used to give a regression equation with the best combination of the least number of variables yielding the highest F-ratio. The final

regression equation had a multiple R of 0.683, an R square of 0.467, and an F-ratio of 12.593 (Signif. F = 0.00). With the constant and the beta weights, the final equation read: Depersonalization = 0.180 + 0.435 (Public Criticism of Teachers and Education) + 0.393 (Need deficiency in the area of Self-actualization) + 0.300 (Student Discipline Problems) + 0.037 (Involuntary Transfer) + 0.161 (Need deficiency in the area of Autonomy) + (-0.163) (Work Overload and Time Demands) + (-0.269) (Low Status of the Teaching Profession) + (-0.302) (Need deficiency in the area of Affiliation). Of the variables in this study, these were the best predictors of Depersonalization.

Multiple Regression Analysis on the Dependent Variable Personal Accomplishment

Multiple regression analysis with block entry was used to determine the percentage of variance of Personal Accomplishment accounted for by background, needs deficiency, and job-related variables. When the background variables were entered in a block at the first step, the multiple R was 0.341 and the R square 0.116 (ie., the background variables accounted for 11.6 % of the variance of Personal Accomplishment). With the entry of the job-related variables in a block at the second step, the multiple R increased 0.225 to 0.566 and the R square increased 0.204 to 0.320 (i.e., the

percentage of variance of Personal Accomplishment accounted for by the background and job-related variables combined was 32.0%). When the needs deficiency variables were entered in a block at the third step, the multiple R increased .064 to 0.630 and the R square increased .076 to 0.396. The background, job-related and needs deficiency variables combined accounted for 39.6% of the variance of Personal Accomplishment. Refer to Table 36.

Table 36

Stepwise Multiple Regression Analysis on Personal Accomplishment with a Block Entry of Independent Variables

Step	Block of Variables Entered	R	R^2	Increase in R^2	F	Signif. F
1	Background variables	0.341	0.116	-------	1.112	0.36
2	Job-related variables	0.566	0.320	0.204	1.755	0.03
3	Needs Deficiency variables	0.630	0.396	0.076	1.949	0.01

Stepwise multiple regression analysis with individual entry was used to examine the impact of individual needs deficiency and job-related variables on Personal Accomplishment. After the entry of the background variables at the first step (R^2: 0.116), the needs deficiency and

job-related variables were entered at succeeding steps. The largest increases in the percentage of variance of Personal Accomplishment were accounted for by:

(a) need deficiency in the area of Self-actualization (10.6 % increase);

(b) Student Discipline Problems (6.4 % increase);

(c) the Lack of Participation in Decision Making (5.7 % increase). Refer to Table 37.

Table 37

Stepwise Multiple Regression Analysis on Personal Accomplishment with Individual Entry of the Independent Variables

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
1	Background Variables	.340	.116	------	1.112	(.36)
2	Self-actualization	.471	.222	.106	2.225	(.01)
3	Role Conflict and Role Ambig.	.471	.222	.000	2.057	(.02)
4	Work Overload & Time Demands	.471	.225	.003	1.945	(.02)
5	Lack of Promotional Opportun.	.475	.226	.001	1.818	(.03)
6	Autonomy	.485	.236	.019	1.797	(.03)
7	Student Discipline Problems	.548	.300	.064	2.344	(.00)

Table 37 (Continued)

Step	Variable Entered	R	R^2	Increase in R^2	F	(Signif.)
8	Lack of Participation in DM	.597	.357	.057	2.858	(.00)
9	Esteem	.597	.357	.000	2.695	(.00)
10	Low Status of the Teaching Profession	.599	.359	.002	2.565	(.00)
11	Lack of Admin. Support	.599	.359	.000	2.431	(.00)
12	Lack of Parental Support	.599	.359	.000	2.310	(.00)
13	Public Criticism	.599	.359	.000	2.198	(.00)
14	Affiliation	.602	.362	.003	2.118	(.00)
15	Staff Conflict	.605	.365	.003	2.048	(.01)
16	Isolation in the Classroom	.613	.376	.011	2.045	(.01)
17	Security	.613	.376	.000	1.953	(.01)
18	Involuntary Transfer	.627	.393	.017	2.009	(.01)
19	Staff Reduction	.630	.396	.003	1.949	(.01)

After all the independent variables had been entered, backward deletion of variables was used to give a regression equation with the best combination of the least number of variables yielding the highest F-ratio. The final regression equation had a multiple R of 0.527, an R square of 0.278, and an F-ratio of 7.492 (Signif.

F = 0.00). With the constant and the beta weights, the final equation read: Personal Accomplishment = 5.284 + 0.379) (Lack of Participation in Decision Making) + (-0.169) (Isolation in the Classroom) + (-0.224) (Percentage of Teaching Time in the Area of English) + (-0.232) (Need deficiency in the area of Autonomy) + (-0.254) (Student Discipline Problems) + (-0.270) (Need deficiency in the area of Self-actualization). Of the independent variables in this study, these were the best predictors of Personal Accomplishment.

Summary of the Multiple Regression Analyses

Multiple regression analyses of the relationship between the independent background, job-related, and needs deficiency variables, and the three burnout subscales yielded higher F-ratios with the dependent variable Emotional Exhaustion than with either Depersonalization or Personal Accomplishment as well as higher F-ratios with Depersonalization than with Personal Accomplishment. The residual variance of Emotional Exhaustion (ie., the variance of Emotional Exhaustion not accounted for by the background, job-related, and needs deficiency variables) was .366 (36.6 %), which was less than the residual variance of Depersonalization (.439 or 43.9 %) and considerably less than the residual variance of Personal Accomplishment (.604 or 60.4%). The

predictive value of the background, job-related, and needs deficiency variables used in this study was greater for Emotional Exhaustion and Depersonalization than for Personal Accomplishment, and considerably greater for Emotional Exhaustion than for Personal Accomplishment.

Stepwise multiple regression analyses of the relationships between the burnout subscales and the other variables revealed again the extent to which need deficiency in the area of Self-actualization was associated with burnout: the percentage of variance of Emotional Exhaustion accounted for by the independent variables increased by 30.3 % when need deficiency in the area of Self-actualization was entered at the second step; the percentage of variance of Depersonalization increased by 16.9%; the percentage of variance of Personal Accomplishment increased by 10.6 %. Student Discipline Problems also accounted for a significant increase in R^2 for Emotional Exhaustion (6.3%), Depersonalization (8.7%), and Personal Accomplishment (6.4 %). Both need deficiency in the area of Self-actualization and Student Discipline Problems were predictors of all three subscales of burnout in the final regression equations. Public Criticism of Teachers and Education accounted for a significant increase in the percentage of variance of Emotional Exhaustion (1.3%) and Depersonalization (2.8%). This variable was also a predictor of Emotional Exhaustion and Depersonalization in the final regression

equations. Work Overload and Time Demands, which accounted for a 5.3% increase in the percentage of variance of Emotional Exhaustion, was a predictor of Emotional Exhaustion and Depersonalization in the final regression equations. Role Conflict and Role Ambiguity, and the Lack of Promotional Opportunities in Teaching accounted respectively for 4.6% and 2.5% of the percentage of variance of Emotional Exhaustion, and were included in the final regression equation for this burnout subscale. Need deficiency in the area of Autonomy was a predictor of both Depersonalization and Personal Accomplishment in the final regression equations. Need deficiency in the area of Affiliation accounted for a 2.8% increase in the percentage of variance of Depersonalization, and was a predictor of this burnout subscale in the final regression equation. Involuntary Transfer, which accounted for a 2.8% increase in the variance of Depersonalization; Staff Reduction; the Low Status of the Teaching Profession; and need deficiency in the area of Affiliation were also predictors of Depersonalization. The Lack of Participation in Decision Making, which accounted for a 5.7% increase in the variance of Personal Accomplishment, and Isolation in the Classroom were predictors of Personal Accomplishment. Of the background variables, the Percentage of Time Spent Teaching in the area of English was a predictor of both Emotional Exhaustion and Personal Accomplishment; Marital Status

and Membership in SETA were predictors of Emotional Exhaustion.

Summary

The results of this study revealed that English teachers in Saskatchewan were not so much "burned out" as they were emotionally exhausted from their work. The mean of the mean scores for all items on the questionnaire related to the subscale Emotional Exhaustion (1.86) was considerably higher than the mean of the mean scores for all items related to Depersonalization (1.16). Although most English teachers felt a sense of personal accomplishment and tended not to depersonalize in their work, many of them perceived high levels of emotional exhaustion. More specifically, English teachers who were between the ages of 40 and 44, who had had 20-24 years of teaching experience, or who were widowed, divorced, or separated experienced significantly higher levels of Emotional Exhaustion than other English teachers. Moreover, needs deficiency--especially in the areas of Esteem and Self-actualization--was closely associated with Emotional Exhaustion. Nearly all the job-related factors associated in the literature with burnout varied significantly with Emotional Exhaustion.

The subscale Depersonalization varied significantly with fewer independent variables than did the subscale

Emotional Exhaustion. Non-specialists in the field of English perceived greater levels of Depersonalization than specialists. Needs deficiency in four of the five need areas--Affiliation, Esteem, Autonomy, and, especially, Self-actualization--was associated with Depersonalization. Ten of the thirteen job-related factors associated in the literature with burnout varied significantly with Depersonalization.

The subscale Personal Accomplishment varied with only a few independent variables. English teachers between the ages of 40 and 44 perceived significantly lower levels of Personal Accomplishment than other English teachers. Need deficiency in the area of Self-actualization was associated with a lack of Personal Accomplishment; however, none of the other need areas varied significantly with this burnout subscale. Only three of the job-related factors associated in the literature with burnout varied significantly with Personal Accomplishment: perhaps this subscale does not measure burnout to the extent that the other two subscales do.

The strong relationship between needs deficiency and the burnout subscales of Emotional Exhaustion and Depersonalization was also reflected in the degree to which the job-related factors varied with the needs deficiency variables: nearly all the job-related factors, except for Involuntary Transfer, varied significantly with all the needs deficiency variables. In the higher

need areas of Self-actualization, Autonomy, and Esteem, the F-ratios were especially high. A few background variables also varied with the needs deficiency variables. Widowed, divorced, or separated English teachers experienced greater needs deficiency in the areas of Security, Affiliation, Esteem, and Self-actualization than other English teachers. Teachers aged 40 to 44 experienced greater need deficiency in the area of Esteem than other English teachers; English teachers in small schools had a greater need deficiency in the area of Affiliation than English teachers in large schools; non-specialists in the field of English had a greater need deficiency in the area of Security than specialists.

Multiple regression analyses of the relationship between the independent variables and the burnout subscales showed that the predictive value of the independent variables was greater for Emotional Exhaustion (R^2: 0.634) than for either Depersonalization (R^2: 0.561) or Personal Accomplishment (R^2: 0.395). The best combination of predictor variables (ie., the least number of variables with the highest F-ratio) for Emotional Exhaustion included need deficiency in the area of Self-actualization, Student Discipline Problems, Work Overload and Time Demands, the Lack of Promotional Opportunities in Teaching, Public Criticism of Teachers and Education, Role Conflict and Role Ambiguity, Marital Status, Percentage of Teaching

Time in the Area of English, and Membership in SETA. The best predictors of Depersonalization were needs deficiency in the areas of Self-actualization, Autonomy, and Affiliation; Public Criticism of Teachers and Education; Student Discipline Problems; Involuntary Transfer; Work Overload and Time Demands; and the Low Status of the Teaching Profession. The best predictors of the lack of Personal Accomplishment were needs deficiency in the areas of Autonomy and Self-actualization, the Lack of Participation in Decision Making, Isolation in the Classroom, Student Discipline Problems, and Percentage of Teaching Time in the Area of English. Thus, need deficiency in the area of Self-actualization and Student Discipline Problems were predictors of all three burnout subscales; Work Overload and Time Demands, Public Criticism of Teachers and Education, Percentage of Teaching Time in the Area of English, and need deficiency in the area of Autonomy were predictors of two burnout subscales.

Chapter V

Summary and Conclusion

Summary of the Purposes and Research Methodology

The primary purpose of this study was to examine the relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan. A secondary purpose was to examine the relationship between the levels of burnout and needs deficiency of English teachers in relation to 13 job-related factors associated with burnout. This study also examined both the levels of burnout and needs deficiency and the job-related factors in relation to 13 background variables.

The literature on the personal and job-related factors associated with teacher burnout was reviewed and the need hierarchy model of Maslow (1954) and Porter (1961, 1962) as well as the motivation-hygiene theory of Herzberg and his associates (1959) were summarized. Studies linking needs deficiency, job dissatisfaction, and teacher burnout were also examined. From the literature, a theoretical framework was developed for examining the relationship between English teachers' perceived levels of burnout and needs deficiency, and the job-related factors associated with these two constructs.

In May, 1985, a four-part Teacher Burnout and Needs Deficiency Questionnaire was sent to 250 teachers randomly selected from the 948 secondary and elementary teachers in Saskatchewan who teach English for 30% or more of the teaching day. One hundred and eighty-one teachers (72.4% of the sample) returned their questionnaires. Of this number, 178 returned their questionnaires by June 10, 1985; 3 questionnaires were returned after June 10, too late to be included in the data for this study.

Oneway analyses of variance were used to examine (a) the relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan; (b) the relationship between the levels of burnout and needs deficiency and the 13 job-related factors associated with burnout; (c) the relationship between the level of burnout, the level of needs deficiency, the job-related factors, and 13 background variables. Multiple regression analyses were also used to gain a broader picture of the relationship between the burnout variables and the others, and to determine how well the level of burnout can be predicted from the other variables.

Findings

On the average, English teachers who responded to

the questionnaire exhibited a moderate level of Emotional Exhaustion, a relatively lower level of Depersonalization, and a moderate level of Personal Accomplishment; however, a significant percentage (approximately 8 or 9%) of the respondents definitely felt burned out from their work. This fact became particularly apparent on the Emotional Exhaustion subscale, where at least a few times a week 26.8% felt used up at the end of the workday, 10.1% felt emotionally drained from their work, 13.0% felt frustrated by their job, 14.8% felt they were working too hard, and 8.7% felt burned out from their work. The majority of English teachers were not suffering the symptoms of burnout; however, a sizeable minority of them were emotionally exhausted.

Although the mean needs deficiency scores in the areas of Security, Affiliation, and Esteem of English teachers in this study were lower than those in Anderson and Iwanicki's (1984) study, the mean need deficiency score in the area of Self-actualization of English teachers in this study (1.71) was slightly higher than that in Anderson and Iwanicki's (1.69), and considerably higher than that in Trusty and Sergiovanni's (1966) study (1.46). Refer to Table 38. The higher level needs deficiency of English teachers in Saskatchewan was greater than their lower level needs deficiency; moreover, need deficiency in the

Table 38

Mean Needs Deficiency Scores of Three Studies

Need Deficiency in the Area of	Trusty and Sergiovanni's (1966) Study	Anderson and Iwanicki's (1984) Study	Current Study
Security	1.09	1.51	1.07
Affiliation (Social)	0.70	1.11	0.90
Esteem	1.65	1.91	1.49
Autonomy	1.47	1.45	1.40
Self-actualization	1.46	1.69	1.71

area of Self-actualization was greater than needs deficiency in the areas of both Autonomy and Esteem.

The Relationship Between the Level of Burnout and the Level of Needs Deficiency

Statistical analyses showed a strong relationship between the level of burnout and the level of needs deficiency of English teachers in Saskatchewan. The five hypotheses (Hypotheses 9, 10, 11, 12, and 13) involving the perceived level of Emotional Exhaustion in relation to the perceived level of needs deficiency were supported by the data. Emotional Exhaustion varied significantly with need deficiency in the areas of Security ($F(5) = 2.57$; $p < .05$), Affiliation ($F(3) = 6.58$; $p = 0.00$), Esteem ($F(4) = 9.95$; $p = 0.00$), Autonomy ($F(5) = 7.49$;

p = 0.00), and Self-actualization (F(4) = 20.85; p = 0.00). As English teachers' perceived need deficiencies in these areas increased, so too did their perceived level of Emotional Exhaustion. The results showed that when teachers' needs, especially their need for self-actualization, were not met through their jobs, they were more prone to feelings of emotional exhaustion.

Four of the five hypotheses (Hypotheses 15, 16, 17, and 18) involving the perceived level of Depersonalization in relation to the perceived level of needs deficiency were substantiated by the data. Depersonalization varied significantly with need deficiency in the areas of Affiliation (F(3) = 3.88; p = .01), Esteem (F(4) = 5.31; p = 0.00), Autonomy (F(5) = 4.75; p = 0.00), and Self-actualization (F(4) = 8.05; p = 0.00). As English teachers' perceived needs deficiency in these areas increased, they were more likely to relate to their students in impersonal ways.

One of the five hypotheses (Hypothesis 23) involving the perceived level of Personal Accomplishment in relation to the perceived level of needs deficiency was supported by the data. Personal Accomplishment varied significantly with need deficiency in the area of Self-actualization (F(4) = 4.86; p = 0.00). Generally as English teachers' perceived need deficiency in this area increased, their sense of personal accomplishment decreased.

Thus, the results of this study strongly suggested that teacher burnout, particularly as it is manifested by Emotional Exhaustion and Depersonalization, is closely related to the inability of English teachers to fulfill their higher-level needs, especially their need for self-actualization, through their jobs. Indeed, when the variable need deficiency in the area of Self-actualization was entered after the background variables in the stepwise multiple regression analyses, the increases in the percentage of variance of the burnout subscales were dramatic: 30.3% for Emotional Exhaustion, 16.9% for Depersonalization, and 10.6% for Personal Accomplishment. Need deficiency in the area of Self-actualization was a predictor variable in the final regression equations for all three burnout subscales. Lower-level Affiliation and Security needs deficiency, which Sergiovanni and Carver (1980) linked with job dissatisfaction, was not so closely related to burnout as was higher-level needs deficiency, which, in Herzberg's (1959) terms, affect job satisfaction.

The Relationship Between the Level of Burnout and the Job-Related Variables

Statistical analyses revealed strong relationships between the burnout subscales Emotional Exhaustion and Depersonalization and most of the 13 job-related factors

associated with burnout. The perceived level of Emotional Exhaustion of English teachers varied significantly ($p < .01$) with Staff Reduction, Staff Conflict, Lack of Administrative Support, the Low Status of the Teaching Profession, Isolation in the Classroom, Public Criticism of Teachers and Education, Lack of Parental Support, Lack of Participation in Decision Making, Student Discipline Problems, Role Conflict and Role Ambiguity, and, especially, Lack of Promotional Opportunities in Teaching and Work Overload and Time Demands. Hypothesis 1 was well supported by the data: the perceived level of Emotional Exhaustion of English teachers increased with the amount of burnout they attributed to the job-related factors. The fact that Emotional Exhaustion varied significantly with 12 of the 13 job-related factors associated in the literature with burnout suggested that this subscale is an accurate measure of burnout.

The perceived level of Depersonalization of English teachers varied significantly ($p < .01$) with Staff Reduction, Involuntary Transfer, Isolation in the Classroom, Public Criticism of Teachers and Education, Lack of Parental Support, Lack of Participation in Decision Making, Lack of Promotional Opportunities in Teaching, Work Overload and Time Demands, Role Conflict and Role Ambiguity, and Student Discipline Problems. Hypothesis 2 was supported by the data: mean scores

for Depersonalization increased as the amount of burnout associated with each of these job-related factors increased. Although the F-ratios were generally lower for Depersonalization than for Emotional Exhaustion and fewer job-related factors varied with Depersonalization, this subscale yet seemed to be an accurate measure of burnout.

The subscale Personal Accomplishment, however, did not vary closely with the job-related factors associated with burnout. The perceived level of Personal Accomplishment varied significantly with only two job-related factors: Involuntary Transfer ($p < .05$) and Student Discipline Problems ($p < .01$). Thus, Hypothesis 3 was not fully supported by the data: the perceived level of Personal Accomplishment of English teachers generally did not decrease with the amount of burnout they attributed to the job-related factors.

Of all the job-related factors included in this study, Student Discipline Problems varied more closely with the burnout subscales--Emotional Exhaustion ($F(6) = 7.33$; $p < .01$), Depersonalization ($F(6) = 8.05$; $p < .01$), and Personal Accomplishment ($F(6) = 3.53$; $p < .01$)--than any of the other factors. Moreover, Student Discipline Problems remained as a predictor variable in all three multiple regression equations.

The Relationship Between the Level of Needs Deficiency and the Job-Related Variables

Oneway analyses of variance also revealed strong relationships between the needs deficiency variables and nearly all the job-related factors associated with burnout. All the hypotheses (Hypotheses 4, 5, 6, 7, and 8) involving the level of needs deficiency in relation to the job-related factors were supported by the data.

Need deficiency in the area of Self-actualization varied significantly ($p < .01$) with 12 of the 13 job-related factors: Lack of Participation in Decision Making ($F = 16.42$), Low Status of the Teaching Profession ($F = 11.62$), Role Conflict and Role Ambiguity ($F = 11.15$), Lack of Administrative Support ($F = 10.12$), Lack of Promotional Opportunities in Teaching ($F = 9.97$), Isolation in the Classroom ($F = 9.42$), Staff Conflict ($F = 6.72$), Public Criticism of Teachers and Education ($F = 6.44$), Work Overload and Time Demands ($F = 6.42$), Student Discipline Problems ($F = 5.82$), Lack of Parental Support ($F = 5.07$), and Staff Reduction ($F = 3.97$). Mean scores for need deficiency in the area of Self-actualization increased as the amount of burnout associated with each of these job-related factors increased. Those English teachers who attributed large amounts of burnout to these factors perceived that their need for self-actualization was unfulfilled through their work.

Need deficiency in the area of Autonomy varied significantly ($p < .01$) with 11 of the 13 job-related factors: Lack of Participation in Decision Making ($F = 31.28$), Lack of Administrative Support (14.61), Role Conflict and Role Ambiguity ($F = 10.23$), Low Status of the Teaching Profession ($F = 9.08$), Isolation in the Classroom ($F = 9.05$), Lack of Promotional Opportunities in Teaching ($F = 6.50$), Staff Conflict ($F = 6.16$), Student Discipline Problems ($F = 4.72$), Public Criticism of Teachers and Education ($F = 4.65$), Lack of Parental Support ($F = 3.65$), and Work Overload and Time Demands ($F = 3.76$). Mean scores for need deficiency in the area of Autonomy increased as the amount of burnout associated with each of these job-related factors increased. Those teachers who attributed large amounts of burnout to these factors perceived that their need for autonomy was unfulfilled.

Need deficiency in the area of Esteem varied significantly ($p < .01$) with 12 of the 13 job-related factors: Lack of Participation in Decision Making ($F = 18.95$), Low Status of the Teaching Profession ($F = 11.86$), Isolation in the Classroom ($F = 11.69$), Lack of Administrative Support ($F = 9.21$), Public Criticism of Teachers and Education ($F = 8.71$), Lack of Promotional Opportunities in Teaching ($F = 6.82$), Staff Conflict ($F = 6.78$), Lack of Parental Support ($F = 6.24$), Role

Conflict and Role Ambiguity (F = 6.12), Staff Reduction (F = 3.72), Student Discipline Problems (F = 3.62), and Work Overload and Time Demands (F = 3.62). Mean scores for need deficiency in the area of Esteem increased as the amount of burnout associated with these job-related factors increased. Teachers who attributed large amounts of burnout to these factors perceived that their need for Esteem was unfulfilled.

Need deficiency in the area of Affiliation varied significantly ($p < .01$) with 11 of the 13 job-related factors: Staff Conflict (F = 14.91), Role Conflict and Role Ambiguity (F = 10.97), Isolation in the Classroom (F = 8.30), Low Status of the Teaching Profession (F = 7.16), Lack of Administrative Support (F = 7.02), Lack of Participation in Decision Making (F = 6.13), Lack of Parental Support (F = 5.69), Student Discipline Problems (F = 5.34), Public Criticism of Teachers and Education (F = 4.98), Staff Reduction (F = 4.91), and Involuntary Transfer (F = 3.81). Mean scores for need deficiency in the area of Affiliation increased as the amount of burnout associated with these job-related factors increased. Teachers who attributed large amounts of burnout to these factors perceived that their need for affiliation was unfulfilled through their jobs.

Need deficiency in the area of Security varied significantly ($p < .01$) with 7 job-related variables:

Isolation in the Classroom ($F = 7.69$), Lack of Administrative Support ($F = 5.98$), Staff Conflict ($F = 5.53$), Staff Reduction ($F = 5.25$), Involuntary Transfer ($F = 5.22$), Low Status of the Teaching Profession ($F = 4.73$), and Lack of Participation in Decision Making ($F = 4.39$). Mean scores for need deficiency in the area of Security increased as the amount of burnout associated with these job-related factors increased. English teachers who attributed large amounts of burnout to these factors perceived that their need for security was unfulfilled.

Overall, the F-ratios of the oneway analyses of variance of needs deficiency by the job-related variables were higher for the upper-level Self-actualization, Autonomy, and Esteem needs than for the lower-level Affiliation and Security needs. Except for Involuntary Transfer and Staff Reduction, all the job-related factors varied significantly ($p < .01$) with needs deficiency in the upper-level areas. The results suggested that Role Conflict and Role Ambiguity, Work Overload and Time Demands, the Lack of Promotional Opportunities in Teaching, Student Discipline Problems, the Lack of Participation in Decision Making, the Low Status of the Teaching Profession, the Lack of Administrative Support, the Lack of Parental Support, Public Criticism of Teachers and Education, Staff Conflict, and Isolation in the Classroom frustrated English teachers' attempts to fulfill their most important

needs.

The Impact of the Background Variables

The background variable Age varied significantly with five dependent variables: English teachers in the 40 - 44 age category experienced significantly more Emotional Exhaustion, less Personal Accomplishment, greater need deficiency in the area of Esteem, and more burnout due to Staff Conflict and Work Overload and Time Demands than English teachers in any other age category.

The background variable Years of Teaching Experience varied with Emotional Exhaustion and Role Conflict and Role Ambiguity: teachers with 20 - 24 years of experience were considerably more emotionally exhausted than English teachers in other categories; less experienced teachers generally attributed more burnout to Role Conflict and Role Ambiguity than experienced English teachers.

When Marital Status was used as an independent variable, English teachers who were widowed, divorced, or separated recorded higher mean scores for Emotional Exhaustion and greater needs deficiency in the areas of Security, Affiliation, Esteem, and Self-actualization than English teachers in other marital categories.

Type of School varied only with Work Overload and Time Demands: English teachers in public schools attributed

less burnout to this factor than English teachers in separate schools. The background variable Size of School varied with Affiliation and Staff Reduction. English teachers in small schools had a greater need deficiency in the area of Affiliation and attributed more burnout to Staff Reduction than English teachers in large schools.

Average class size varied only with Role Conflict and Role Ambiguity: English teachers in small classes attributed more burnout to this factor than did English teachers in large schools.

Type of Community varied with Staff Reduction, Isolation in the Classroom, and Work Overload and Time Demands. English teachers in urban schools attributed significantly more burnout to Isolation in the Classroom and Work Overload and Time Demands; however, rural English teachers attributed significantly more burnout to Staff Reduction than did urban English teachers.

Percentage of Teaching Time in the Area of English varied with Isolation in the Classroom, Student Discipline Problems, and Role Conflict and Role Ambiguity. As their percentage of teaching time in the area of English increased, teachers attributed less burnout to these job-related factors.

Field of Specialization varied with Emotional Exhaustion, Depersonalization, need deficiency in the area of Security, Isolation in the Classroom, Lack of Participa-

tion in Decision Making, Student Discipline Problems, and Role Conflict and Role Ambiguity. Non-specialists in the field of English had higher scores on the Emotional Exhaustion and Depersonalization subscales and greater needs deficiency in the areas of Security and Self-actualization than specialists had; they attributed significantly more burnout to these job-related factors than did specialists.

Membership in SETA varied with Lack of Parental Support and Student Discipline Problems. Members of SETA attributed significantly less burnout to these factors than did non-members.

The background variables Sex, Level of Education, and Grade Level Taught varied with none of the dependent variables.

Implications for Administrators and Teachers

A highly significant relationship existed between the perceived levels of burnout of English teachers in Saskatchewan and their perceived levels of needs deficiency, especially in the area of self-actualization. A sizeable minority of English teachers were emotionally exhausted, and these teachers felt that their need for self-actualization was not being met by their job. Moreover, both Emotional Exhaustion and need deficiency in the area of Self-actualization varied significantly (F-prob.: $< .01$)

with Lack of Participation in Decision Making, Lack of Administrative Support, Role Conflict and Role Ambiguity, Lack of Promotional Opportunities in Teaching, Isolation in the Classroom, Public Criticism of Teachers and Education, Low Status of the Teaching Profession, Work Overload and Time Demands, Staff Conflict, and Student Discipline Problems. The nature of the school and the teaching profession need to be improved in these areas if teachers are to work in an environment which better promotes their self-actualization and alleviates their emotional exhaustion.

Administrators need to involve teachers in setting goals and determining methods and procedures. Without such involvement, teachers are powerless to improve the situation in their classrooms. Top-down decision making might be acceptable for teachers who have no desire to fulfill their needs for autonomy and self-actualization through their work; however, for "motivation seekers," participation in decision making is vital to self-fulfillment. Administrators must try to increase teachers' participation in decision making, problem solving, goal setting, and program development if teacher burnout is to be alleviated.

Administrators must support and properly supervise teachers, and be sensitive to their needs and problems. Without adequate communication between teachers and

administrators, student discipline problems, staff conflict, and other problems which deny English teachers the fulfillment of their higher-level needs and thereby hasten burnout cannot be solved. Teachers and administrators also need to promote educational goals and policies outside the school to help reduce the public's criticism of teachers and education, and to improve the status of the teaching profession.

Changes at the school level alone, however, may not be enough to abate teacher burnout. Problems with the very nature of teaching and the teaching profession frustrate teachers' attempts to fulfill their higher-level needs. The Lack of Promotional Opportunities in Teaching, Role Conflict and Role Ambiguity, and Work Overload and Time Demands were the three job-related variables grouped in the literature review as factors most likely to limit teachers' attempts to fulfill their need for self-actualization. In the multiple regression analyses, all three remained in the regression equation as predictors of Emotional Exhaustion.

So long as "teachers are not respected within the profession" (Cunningham, 1983, p. 42) and have few promotional opportunities, teachers cannot achieve maximum personal and professional success or satisfaction; that is, they cannot self-actualize. The structure of the teaching profession needs to be reorganized so that

competent, experienced teachers will want to remain in the classroom. Cunningham (1983) argued that

> Teachers must be provided an opportunity for increased interaction, support, and promotion through a hierarchy of positions which [makes] structural provisions for them to assume responsibilities, initiative, authority, and salary commensurate with their interests, talents, and abilities. Teachers would begin their careers by implementing educational plans under close supervision; then they would move to higher-level positions where they would serve as resource persons who diagnose and develop instructional activities for students and finally on to positions where they would have major planning and supervisory responsibility over a set of teachers in a subject or grade area. (p. 43)

Without career possibilities such as these, experienced teachers are bound to become frustrated, dissatisfied, and, possibly, burned out.

Schwab and Iwanicki (1982a) showed that a significant relationship exists between role conflict and role ambiguity and teacher burnout. This study confirmed their findings. Conflict between teachers' various roles within the school and between their roles inside and outside the school makes great demands on them. Teachers who have difficulty juggling contradictory and ambiguous job demands are susceptible to burnout. Administrators should be aware that inexperienced teachers are more likely to feel burned out as a result of role conflict and role ambiguity than are experienced teachers.

English teachers in this study attributed more

burnout to Work Overload and Time Demands than to any other single job-related factor. The work load of English teachers, who often have more marking than teachers in other subject areas and, because English is a compulsory course, larger class sizes, is great. English teachers in separate or urban schools of Saskatchewan were especially troubled by heavy work loads. Administrators should recognize the extra demands on English teachers, and allot them more preparation and marking time than they currently have.

English teachers in the 40 - 44 age category perceived significantly more emotional exhaustion, less personal accomplishment, more esteem need deficiency, and more burnout due to staff conflict and work overload than other English teachers. Whether because teachers at this age perceived that the demands of the job outweighed the rewards, or because the effects of long-term stress finally began to show, administrators must pay special attention to this group. Perhaps sabattical leaves for teachers might offer rejuvenation.

Evidence from this study also suggested that stressful events or changes in teachers' lives makes them less resistant to job stress and burnout. Widowed, divorced, or separated teachers reported greater emotional exhaustion and needs deficiency in the areas of security, affiliation, and self-actualization than other English teachers.

Teacher organizations and school boards should look towards hiring professional psychologists to counsel both rural and urban teachers during moments of crisis in their lives.

Finally, administrators should encourage school boards to hire specialists in the field of English to teach this subject. Non-specialists reported more emotional exhaustion, depersonalization, and needs deficiency in the areas of security and self-actualization than specialists in English. Moreover, non-specialists attributed significantly more burnout to Isolation in the Classroom, Student Discipline Problems, Lack of Participation in Decision Making, and Role Conflict and Role Ambiguity than specialists. Clearly, English teachers with expertise in their field are less likely to burn out than English teachers with specializations in other areas.

Suggestions for Further Study

The data on burnout were collected by using the Maslach Burnout Inventory, for which no means has yet been established to weight the three subscales or to combine them into an overall burnout score. English teachers in this study scored higher on Emotional Exhaustion than on Depersonalization. Did this mean that they were less burned out than they would have been had they scored higher on Depersonalization, or did it

mean that they were in a different stage of burnout? No empirical evidence exists to enable us to analyze the pattern of the subscale scores. More research on and with the Maslach Burnout Inventory is needed before such a question can be answered.

The Maslach Burnout Inventory is limited in other ways as a research tool. It does not measure physical or intellectual exhaustion, nor does it treat personality traits or other predispositional factors. The MBI assumes an environmental approach to burnout. Further research is needed to develop a more comprehensive measure to balance better the personal and the environmental factors involved in burnout.

Longitudinal studies are also needed to assess the causes and the consequences of stress and burnout, as well as the effectiveness of different coping and intervention strategies. Ideally, the MBI or any other measure of burnout should be administered to teachers at several different times during the school year to improve its accuracy. Teachers in other subject areas and in other provinces should be tested and their scores compared to those of English teachers in Saskatchewan. School boards and administrators might also benefit if the MBI were administered to teachers in specific jurisdictions, and comparisons made between schools, school divisions, and school districts.

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Appendix 1

Teacher Burnout and Needs Deficiency Questionnaire

TEACHER BURNOUT AND NEEDS DEFICIENCY QUESTIONNAIRE

Clint Uhrich
College of Education
U. of S.
Saskatoon

Part I

Instructions: For each background variable, check one of the boxes provided.

1. Age in years — 20-24 ☐ 25-29 ☐ 30-34 ☐ 35-39 ☐ 40-44 ☐ 45-49 ☐ 50 & over ☐

2. Sex — Male ☐ Female ☐

3. Marital status — Single ☐ Married & children ☐ Married without children ☐ Widowed, divorced, or separated ☐

4. Years of teaching experience — 0-4 ☐ 5-9 ☐ 10-14 ☐ 15-19 ☐ 20-24 ☐ 25-29 ☐ 30 & over ☐

5. Level of education — No degree ☐ 1 degree ☐ 2 Bachelors ☐ P.G.D. ☐ Masters & up ☐

6. Grade level taught — Elementary ☐ Middle yrs/Junior high ☐ High school ☐

7. Type of school — Public ☐ Separate ☐ Private ☐

8. Size of school by number of students — Less than 150 ☐ 151-300 ☐ 301-500 ☐ Over 500 ☐

9. Average class size by number of students — Less than 20 ☐ 20-24 ☐ 25-29 ☐ 30-34 ☐ 35 or more ☐

10. Type of community — Rural ☐ Urban ☐ Suburban ☐

11. Percentage of teaching time in the area of English — 30-50% ☐ 51-75% ☐ 76-100% ☐

12. Is English your field of specialization? — Yes ☐ No ☐

13. Are you a member of the Saskatchewan English Teachers' Association? — Yes ☐ No ☐

Part II

Instructions: For each item, check one of the seven boxes provided.

	Never	A few times a year	Monthly	A few times a month	Every week	A few times a week	Every day
1. I feel emotionally drained from my work.	☐	☐	☐	☐	☐	☐	☐
2. I feel used up at the end of the workday.	☐	☐	☐	☐	☐	☐	☐
3. I feel fatigued when I get up in the morning and have to face another day on the job.	☐	☐	☐	☐	☐	☐	☐
4. I can easily understand how my students feel about things.	☐	☐	☐	☐	☐	☐	☐
5. I feel I treat some students as if they were impersonal "objects."	☐	☐	☐	☐	☐	☐	☐
6. Working with people all day is really a strain for me.	☐	☐	☐	☐	☐	☐	☐
7. I deal very effectively with the problems of my students.	☐	☐	☐	☐	☐	☐	☐
8. I feel burned out from my work.	☐	☐	☐	☐	☐	☐	☐
9. I feel I'm positively influencing people's lives through my work.	☐	☐	☐	☐	☐	☐	☐
10. I've become more callous toward people since I took this job.	☐	☐	☐	☐	☐	☐	☐

	Never	A few times a year	Monthly	A few times a month	Every week	A few times a week	Every day
11. I worry that this job is hardening me emotionally.	☐	☐	☐	☐	☐	☐	☐
12. I feel very energetic.	☐	☐	☐	☐	☐	☐	☐
13. I feel frustrated by my job.	☐	☐	☐	☐	☐	☐	☐
14. I feel I'm working too hard on my job.	☐	☐	☐	☐	☐	☐	☐
15. I don't really care what happens to some students.	☐	☐	☐	☐	☐	☐	☐
16. Working directly with people puts too much stress on me.	☐	☐	☐	☐	☐	☐	☐
17. I can easily create a relaxed atmosphere with my students.	☐	☐	☐	☐	☐	☐	☐
18. I feel exhilarated after working closely with my students.	☐	☐	☐	☐	☐	☐	☐
19. I have accomplished many worthwhile things in this job.	☐	☐	☐	☐	☐	☐	☐
20. I feel like I'm at the end of my rope.	☐	☐	☐	☐	☐	☐	☐
21. In my work, I deal with emotional problems very calmly.	☐	☐	☐	☐	☐	☐	☐
22. I feel students blame me for some of their problems.	☐	☐	☐	☐	☐	☐	☐

Part III

Instructions: For each item, indicate, by checking one of the boxes provided, how much of the characteristic

(a) is now connected with your school position;

(b) you think should be connected with your school position.

	LOW			MODERATE			HIGH
1. The feeling of self-esteem a person gets from being in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
2. The authority connected with my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
3. The opportunity for personal growth and development in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
4. The prestige of my school position within the school							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
5. The opportunity for independent thought and action in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐

	LOW			MODERATE			HIGH
6. The feeling of security in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
7. The feeling of self-fulfillment a person gets from being in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
8. The prestige of my school position outside of the school							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
9. The feeling of worthwhile accomplishment in my school position							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
10. The opportunity, in my school position, to give help to other people							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐
11. The opportunity, in my school position, for participation in the setting of goals							
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐

12. The opportunity, in my school position, for participation in the determination of methods and procedures

	LOW			MODERATE			HIGH
(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐

13. The opportunity to develop close friendships in my school position

(a) is now	☐	☐	☐	☐	☐	☐	☐
(b) should be	☐	☐	☐	☐	☐	☐	☐

Part IV

Instructions: Indicate, by checking the appropriate box, the amount of burnout you experience in your present school position as a result of each particular job-related factor.

	Small amount			Moderate amount		High amount	
1. Role conflict and role ambiguity	☐	☐	☐	☐	☐	☐	☐
2. Student discipline problems	☐	☐	☐	☐	☐	☐	☐
3. The low status of the teaching profession	☐	☐	☐	☐	☐	☐	☐
4. Staff conflict	☐	☐	☐	☐	☐	☐	☐
5. Involuntary transfer	☐	☐	☐	☐	☐	☐	☐
6. Work overload and time demands	☐	☐	☐	☐	☐	☐	☐
7. The lack of participation in decision making	☐	☐	☐	☐	☐	☐	☐
8. The lack of administrative support	☐	☐	☐	☐	☐	☐	☐
9. Isolation in the classroom	☐	☐	☐	☐	☐	☐	☐
10. Staff reduction	☐	☐	☐	☐	☐	☐	☐
11. The lack of promotional opportunities in teaching	☐	☐	☐	☐	☐	☐	☐
12. The lack of parental support	☐	☐	☐	☐	☐	☐	☐
13. Public criticism of teachers and education	☐	☐	☐	☐	☐	☐	☐

Appendix 2

Covering Letter

UNIVERSITY OF SASKATCHEWAN

COLLEGE OF EDUCATION

DEPARTMENT OF EDUCATIONAL
ADMINISTRATION
306-343-5498

SASKATOON, CANADA
S7N 0W0

May 2, 1985

Dear Colleague:

I am an English teacher and, currently, a graduate student in Educational Administration at the University of Saskatchewan. I am gathering data for my M.Ed. thesis. My study has been approved by my Graduate Thesis Committee.

My study examines the relationship between teachers' perceived levels of burnout and their needs deficiency, and the job-related factors associated with these concepts. The 949 teachers in Saskatchewan who teach English for 30% or more of the teaching day form the population for this study. You are one of the 250 teachers randomly selected for the sample. I hope that you will take time to complete the enclosed questionnaire. I need your help if this study is to be truly representative of English teachers in Saskatchewan.

The enclosed questionnaire consists of four parts. Part I gathers background information. Part II is a modified version of the Maslach Burnout Inventory, a measure of teachers' perceived burnout levels. Part III is a modified version of the Porter Need Satisfaction Questionnaire, a measure of the extent to which teachers' needs for self-actualization, autonomy, esteem, affiliation, and security are met by their jobs. Part IV deals with the job-related factors associated with burnout. Please complete the questionnaire and mail it to me in the enclosed stamped envelope. Your responses will remain strictly confidential and your anonymity will be assiduously protected.

My thesis advisor is Dr. Larry Sackney. Any inquiries about this research may be directed either to him or to me at the above address.

Thank you for your assistance.

Sincerely,

Clint Uhrich

Clint Uhrich