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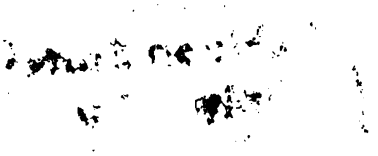

COMMUNICATION, STRESS AND BURNOUT IN EDUCATION

By

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ABSTRACT

COMMUNICATION, STRESS AND BURNOUT IN EDUCATION

By

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Past studies of burnout have argued that teachers, as caregivers, have a greater risk of burnout due to their constant involvement with students. These studies have shown repeatedly that the variables of overload, role conflict and role ambiguity are associated with either the burnout variables of emotional exhaustion, depersonalization and reduced personal accomplishment and/or job satisfaction, and occupational commitment.

There are, however, variables related to communication within schools that are perceived as mediating the burnout process. These are supervisory support and participation in decision making.

This paper addresses the interactive relationship that exists between all of these variables through the development of a causal model of the burnout process.

To Craig, with love

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I would like to express my thanks to some of the people who helped make this work possible.

Thank you

Dr. Katherine Miller - for your guidance and support.

Dr. James Stiff and Dr. Cass Book - for your patience and insights.

Craig - for your love and belief in me.

Mom - for believing her children could do anything they set out to do.

Sabrina, Eric and Perry - for constantly worrying about me.

Maureen - for making sure I kept both feet on the ground.

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CHAPTER ONE

Theory and Literature Review

> Without work all life goes rotten. But when work is soulless, life stifles and dies. (Camus)

Soul....essence, life-blood, marrow, embodiment, vital core. These are the ideas we associate with the soul of something. While Camus writes that work is essential to life, he qualifies his statement by writing that it must be work which has a soul. As individuals and members of organizations we search for this work. We attempt to find and keep this vital core alive. How is this accomplished? This question lies at the center of the research on burnout.

The research on the role of stress in the workplace is perhaps more vital now then it was when initially begun. Organizations are changing rapidly as a result of increasing societal and technological change. These changes affect not only the structure and outcomes of organizations but also the interaction between employees within organizations. Both internal and external change can lead to an increase in the level of individual uncertainty about the organization, and occupational and organizational role requirements. Uncertainty associated with change has been shown to lead to increased levels of stress and ultimately burnout (Tetrick & La Rocco, 1987). Burnout has been associated with turnover and absenteeism. Both absenteeism and turnover are

organizational problems that, as recently as 1983, have been estimated to cost organizations in the United States between $50 billion and $75 billion a year (Wallis, 1983).

Human service organizations and certain "helping" professions have been central to the research on stress and burnout. The educational organization and the profession of teaching are prime examples. Stress in teaching induced by the educational structure and process is widely documented. Teachers work in limited contact with other staff, and yet almost constant contact with their students. Teachers work within a very structured organization and report limited input into school level or policy making decisions. They feel that their profession is given little community recognition and that they are hindered in their work by inadequate funding and overcrowded classrooms (Goodlad, 1983; Farber, 1984). Additionally, schools within the United States have increasingly, in recent years, become the target for major reform by governmental, educational, parental and business groups (Timar & Kirp, 1989). In addressing the changing nature of the school and, consequently, the role of the teacher, the reform movement has emphasized improvement in the quality of teachers entering the profession. Conley, Bacharach, and Bauer (1989) point out that the reformers have focused on changes in teacher education to enhance the quality of teachers and on the development of reward systems linked to professional accomplishment. They have not, until recently, however,

seriously considered the necessity of changing organizational structure and teacher activities to allow highly qualified teachers to achieve rewards based on accomplishment. The role of the teacher, as with other helping professionals, is a very complex one. It is one which leads, in some instances, to such elevated levels of stress that teachers burn out and either leave the profession or continue to teach at a minimal level of involvement (Farber, 1984; Schwab, Jackson & Schuler, 1986).

Awareness of the above becomes both an organizational and a societal issue. If, due to certain variables--societal, organizational, situational or personal--good teachers are leaving the profession, not performing at their maximum or performing without enthusiasm, then children and, eventually, society are being negatively impacted. Goodlad writes in his 1984 study of schools:

> In general the practicing teacher--to the degree we can generalize from our findings--functions in a context where the beliefs and expectations are those of a profession but where the realities tend to constrain, likening actual practice to a trade . . . a question arises as to whether the circumstances can be made conducive to developing in all teachers the behavior a profession entails. By its very nature a profession involves both considerable autonomy in decision making and knowledge and skills developed before entry and then honed in practice. The teachers in our sample, on the whole, went into teaching because of those inherent professional values. However, they encountered in schools many realities not conducive to professional growth. (Goodlad, 1984)

Identifying the variables that can intervene to halt or reverse the erosion of skilled professionals is critical to the continued improvement of the educational process.

The underlying argument presented in this paper is that there is a model of the process of burnout within educational settings that can be identified for teachers. This paper addresses the relationship among organizational stressors (work load, role conflict, role ambiguity), communication variables (participation in decision making and supervisory support), three dimensions of burnout (emotional exhaustion, depersonalization, reduced personal accomplishment), and the outcome variables of occupational commitment and job satisfaction.

Burnout

Burnout is a complex, multisymptomatic concept that has engendered a great deal of debate as to its definition (Schuler, 1980). While, as Maslach points out, the evocative quality of the term has fueled the development of multiple definitions, it has also given rise to a large body of research. This research on burnout has led to agreement on some basic definitional issues. It is generally agreed by researchers that burnout is an individual, psychological process that is perceived as having negative consequences by the individual (Maslach, 1982a). While burnout is viewed as occurring within the individual in response to their needs, values, abilities, experience and personality characteristics (Schuler, 1980), its sources and interventions can occur at the individual, dyadic, group, and the organizational levels.

From research done mainly within the human services field, three dimensions of burnout are agreed to exist.

These are: (1) exhaustion, which is conceived of as primarily psychological or emotional exhaustion. Emotional exhaustion is characterized by: "a loss of feeling and concern, a loss of trust, a loss of interest, a loss of spirit" (Maslach, 1982a, p. 32), (2) depersonalization, or the negative shift over time in responses to others and (3) a sense of reduced personal accomplishment in terms of morale and productivity. This is represented by an individual's loss of a sense of efficacy on their job (Pines, Aronson & Kafry, 1981; Maslach, 1982a; Jackson, Schwab & Schuler, 1986; Miller, Ellis, Zook, & Lyles, 1990).

Changes in these dimensions have been shown to be affected by situational variables perceived as individually problematic such as workload, role conflict and role ambiguity. Research also indicates, however, that these burnout dimensions can be mediated or lessened by the presence of communication variables such as social support from either supervisors or co-workers (McGee, Cashman & Goodson, 1987; Marcelissen et al., 1988; Miller, Ellis, Zook & Lyles, 1990) and participation in decision making (Jackson, 1983; Miller et al., 1990).

In an effort to conceptually construct the model proposed in this study, I will discuss the three levels of relationships, (Organizational stressors-->Burnout dimensions and Outcome indicators; Communication/intervening variables-->Burnout dimensions and Outcomes indicators; and Burnout dimensions-->Outcome indicators). The first of these

relationships to be examined is that of the organizational variables, workload, role ambiguity and role conflict, which are viewed as sources of stress, with the burnout dimensions of emotional exhaustion, depersonalization, and personal accomplishment and the outcome indicators of job satisfaction and occupational commitment.

Organizational Stressors

Workload

Workload is defined as the amount and level of work an individual is expected to accomplish in a specified amount of time. Stress arises when the work or "burden . . . exceeds the person's ability to handle it" (Maslach, 1982a, p. 38). This is referred to in the burnout literature as overload. Workload is sometimes viewed as a perceptual variable. For example, two individuals may have identical workloads and one may perceive him/herself in a state of overload while the other perceives him/herself in a state of underload. Workload can also be considered in terms of the objective requirements of the position. This is illustrated by the actual units (e.g., patients, students, cases, files) an individual is responsible for (French & Caplan, 1972; Pines, 1982). Objective and perceived workload have both quantitative and qualitative aspects. Quantitative overload refers to too much work assigned for a specific time. Qualitative overload implies that the work is too difficult (Cooper & Marshall, 1976). These concepts are interrelated in that the quantity of work can have an effect on the

quality and vice versa (French & Caplan, 1972). To simplify the process of addressing these issues, however, they are presented separately here.

Pines and Maslach (1978), in research with psychiatric hospital staff, found positive relations between quantitative workload and level of stress reported. Interviews indicated that (1) when patient load was too great staff members attempted to separate themselves from their jobs and didn't regard their jobs as sources of personal accomplishment and (2) the longer the hours worked the more likely staff members were to report stress and negative feelings.

Similar findings about quantitative workload have been found in educational settings. Simply having more to do in a day's time then they feel they can accomplish and too many students to teach are often cited by teachers as major sources of stress (Needle, Griffin & Svendsen, 1981). These findings are also supported in a five year study of the individual concepts of teacher stress held by "experts" conducted by Fimian (1987). The subject pool of experts was comprised of those who had conducted research on teacher stress during a given year. The sources of stress related to the amount of work were too much work, overcrowded classrooms or too large a caseload, too much paperwork, having to do more than one thing, thinking of other things at once, becoming easily overcommitted and not having enough time to complete things. This stress was manifested emotionally by feeling unable to cope, anxious, depressed,

vulnerable, and insecure and physiologically by exhaustion, tiredness and related health problems. Levitov and Wangberg (1983) cited too much to do, and paperwork as causing not only negative feelings for teachers about their work but also negative feelings about their own competence. The teachers in this study also indicated that their workload had a negative effect on their interactions with their students. This leads us to consider the qualitative impact of overload on teachers.

In schools, teachers spend the majority of each working day in almost constant contact with their students. Interactions with disruptive students are often stressful (Cichon & Koff, 1980; Dedrick, Hawkes, & Smith, 1981; Feitler & Tokar, 1982; Smilansky, 1984) perhaps because discipline problems are perceived as indicative of a rejection of the teacher's authority (Fimian, 1987). In summary, there are qualitative aspects of teacher/student interactions that lead teachers to feel a heightened sense of overload and consequently, a greater level of stress.

The concept of load also often encompasses the types of responsibilities one has. French and Cooper (1972) differentiate between responsibility for <u>people</u> and responsibility for <u>things</u> (budgets, equipment, etc.). They write that responsibility for people results in greater levels of physically related stress than does responsibility for things. Teachers have direct and continual contact with students. This is anticipated to be a significant distinction.

Within a caregiving organization there are various groups that are crucial to the caregiving process. In a school there are administrative, educational support, clerical and general support functions in addition to those of the teacher. These individuals do not, however, have the continual student contact that is central to a teacher's position. It is heuristically valuable, therefore, when addressing the impact of workload on stress and burnout, to separate groups within caregiving institutions based on their level of client contact (Pines & Maslach, 1978; Miller, Ellis, Zook & Lyles, 1990).

While the research presents a clear picture of the general impact of increased workload, the goal of this paper is to define specifically its links to various stressors and burnout dimensions. This specification, as discussed in Jackson et al. (1986) is not a simple matter. The interaction of the qualitative and quantitative aspects of workload tend to color the relationships. The hypothesized links presented here are assumed, however, to be general enough to apply to both the elementary and high school teacher and both qualitative and quantitative aspects of the classroom situation. These hypotheses and the logic underlying them will now be discussed. In the model, workload is an exogenous variable predicted to be positively related to role ambiguity, role conflict and emotional exhaustion. This addresses both the issues of quantity and quality of client contact. As the sheer quantity of their work increases teachers will become

more physically and emotionally exhausted. This quantity may refer to simply having a large number students in the classroom or additional responsibilities (reports, meetings) that they feel are tangential to the process of teaching. As the quantity of their work increases the quality of their interactions with students may diminish. There will be less time to focus on the individual needs of students. Because of this teachers may perceive a heightened sense of uncertainty about their expected role within the school (role ambiguity) and may find themselves receiving what they may perceive or what actually are conflicting directions concerning their role (role conflict).

Role Stress

The next variables of interest are role ambiguity and role conflict. When teachers arrive at school in the morning, they have certain expectations about how they will spend the day. These expectations are associated with the role they fill in the organization. Roles, as defined by Katz and Kahn (1978) "are standardized patterns of behavior required of all persons playing a part in a given functional relationship" (p. 43). Roles carry with them both internal and external expectations. The internal expectations may be derived from perceptions of and attitudes about the occupation or organization. External expectations may be those associated with the objective criteria of the job as defined by the organization, such as a job description, or from the more subjective expectations associated with supervisor or

co-worker perceptions of the role (Kahn, Wolfe, Quinn & Snoek, 1964).

Whatever the source, perceived environmental uncertainty has been shown in research to be linked to increased levels of stress (Van Sell, Brief, & Schuler, 1981). Uncertainty about one's role within an organization can fall into two categories--role ambiguity and role conflict.

Role ambiguity occurs when the person holding a particular position isn't sure of what the role actually consists of and how it is measured. Katz and Kahn (1978) write that early researchers assumed that "ambiguity frustrates the human need for clarity and structure in the environment" (p. 206) and, therefore, leads to increased stress.

Role conflict, on the other hand, is derived from conflicting job or role demands. Conflict can arise from an individual's identification with a role and an opposing demand from a supervisor or organization; from actually receiving multiple, conflicting sets of instructions or from conflicting demands inherent in the requirements of the position itself (Kahn et al., 1964). Within the school setting, for example, teachers may find themselves attempting to balance the goals of maximizing educational outcomes with the reality of fulfilling their administrative functions.

Both role ambiguity and role conflict have been shown to be positively related to burnout indicators. In their review of the role conflict and ambiguity literature,

Van Sell, Brief, and Schuler (1981) report that, across a variety of occupational groups, the "best-documented outcomes of role conflict are job dissatisfaction and job-related tension" (p. 48). Outcomes for role ambiguity are less consistent. These writers do indicate, however, that most studies show that those with high levels of ambiguity perceive themselves as anxious, depressed, having a lower level of job involvement and organizational commitment and lowered perceptions of their own, their supervisors and the organization's performance.

Research on teacher stress by Schwab and Iwanicki (1982) indicated that role conflict explained more of the variance associated with both emotional exhaustion and depersonalization than did role ambiguity. Role ambiguity alone, however, accounted for most of the variance in personal accomplishment. Similarly, Schwab, Jackson and Schuler (1986) found that role conflict accounted for the largest amount of variance for emotional exhaustion and depersonalization among a sample of teachers. They also found, however, that role ambiguity, while not as great a predictor as role conflict, was still significantly related to emotional exhaustion. Neither role conflict nor role ambiguity were significant predictors of personal accomplishment.

Finally, research indicates that these job related stressors are not only precursors to job burnout but negatively related to job satisfaction and occupational

commitment as well (Golembiewski, 1982; Pines, 1982; Miller et al., 1990; Schwab, Jackson & Schuler, 1986).

In the model of the process of burnout for teachers, role conflict acts as an antecedent to depersonalization and emotional exhaustion. As the level of role conflict increases so the quality of teachers' interactions with others will decrease and so will their sense of concern and interest. This can be expected to lead to an increased need to withdraw from ones students, co-workers and supervisor. It is hypothesized, therefore, that a positive relationship will exist between role conflict and depersonalization and role conflict and emotional exhaustion. Role ambiguity is proposed to be positively associated with emotional exhaustion. The greater the role uncertainty teachers experience the more apt they will be to express the loss of spirit and interest associated with emotional exhaustion. Role ambiguity is also indicated by research as the sole antecedent to reduced personal accomplishment. Uncertainty leads to teachers questioning the level of accomplishment they derive from their work. These two variables are, consequently, hypothesized as being positively related.

Communication Variables

While certain organizational variables may increase the level of stress, there are communication variables that can intervene in the burnout process and reduce the level of stress. Research has indicated that two variables--participation in decision making and support (both co-worker

and supervisor)--lessen the impact of stress. In this section I will explore the relationship that exists between these communication variables and the stressors of role ambiguity, role conflict; the burnout variables of emotional exhaustion, depersonalization and reduced personal accomplishment and the outcome variables of job satisfaction and organizational commitment.

Social Support

Support in the workplace--both supervisory and co-worker--has been viewed in research as a key factor to reducing the stress induced by occupational requirements and organizational structure and demands. Social support is defined by Albrecht and Adelman as "verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one's life experience" (1987, p. 19).

A question central to support in the workplace is whether two types of support (supervisory and co-worker) have equal impact on stress. Research indicates that while co-worker support may be received more frequently, supervisor support is perceived as more important to employees in both the educational and non-educational setting (Marcellissen et al., 1988; Conley et al., 1989). Brissie, Hoover-Dempsey and Bassler (1988) found that principal support accounted for 25 percent of the variance in burnout reported by 1,213 elementary teachers. Lack of administrative support is

reported by teachers as evidence of increased stress and job dissatisfaction (Levitov & Wangberg, 1983).

Jackson et al. (1986) note that "feelings of personal accomplishment are highest for teachers in supportive environments, with support from one's principal appearing to be particularly important" (p. 636). They also found that the lack of support from a teacher's principal was the only condition leading to a sense of depersonalization. These findings indicate that support from ones supervisor is not only important to teachers but also has broad ranging effects.

The opposite argument is presented by Schwab et al. (1986) who did not find a significant relationship between principal social support and various aspects of burnout but did find that co-worker social support acted as a small but still significant moderating factor for emotional exhaustion, depersonalization and personal accomplishment.

In addressing the issue of co-worker support, Pines writes that support from co-workers is one of the components of the organizational environment that is an important intervening factor in the process of burnout (Pines, 1982). While this has been suggested theoretically, it has not been empirically supported. Contrary to the theoretically predicted connection co-worker support is not often cited as a significant intervening variable in the lives of teachers (Bacharach, Bauer & Conley, 1986). Lack of support from colleagues is cited as having less impact on teachers' stress

level than lack of positive feedback from administrators (Dedrick, Hawkes & Smith, 1981).

Lack of effect of co-worker support can, perhaps, be explained by the professional status of teaching and the rather self-contained nature of the work. Team activities or sharing of work, which would allow for the diffusion of stress associated with one's work, is not a key element in teacher success in most school settings. In an overview of the research done on teacher participation in schools, Conley, Schmidle and Shedd (1988) write about the social norms and structural features within schools that interfere with peer interaction. "The solitary nature of most teaching assignments, the physical layout of school facilities, and restrictive time schedules usually preclude such interaction, as do organizational norms that discourage advice giving (or seeking) and treat work as something necessarily and exclusively done in the classroom" (p. 26).

Based on these findings, therefore, supervisory support will be the sole form of social support considered in this study. The impact of supervisory support itself, however, can be a rather complex issue. Ray and Miller (1989) write that the impact of supervisory support within the school setting may be limited by the inability of supervisors to make broad ranging structural changes. In the school setting a principal may be limited to less concrete types of support. These researchers found that perceived supervisory support mediated teacher levels of role ambiguity but had no impact

on their sense of role conflict. This may come about because issues or situations that cause increases in conflicting role demands for teachers may be more student and curriculum oriented. Decisions about wide ranging changes on these issues are not totally within the realm of the principal but must be coordinated with district, local and state agencies.

Given the above research findings the following relationships are predicted: Supervisory support is hypothesized as negatively related to role ambiguity because of a reduction in the level of uncertainty. It is also predicted to be negatively correlated with depersonalization and reduced personal accomplishment. The greater the sense of a supportive supervisor, the more positive teacher reactions should be to their supervisors, co-workers and students and the less apt they should be to withdraw from them. The more supervisory support teachers receive, the greater the sense of personal accomplishment. As principals indicate support for teachers' efforts the more apt teachers are to feel that they are productive and, subsequently, experience an increase in their level of personal accomplishment. Supervisory support and reduced personal accomplishment are, therefore, predicted to be negatively correlated.

Participation in Decision Making

Participation in decision making is a widely studied construct related to organizational communication. The interest in it comes from a variety of directions. In a

meta-analysis of the research, Miller and Monge (1986) found that there is strong support for the idea that participation effects satisfaction and somewhat lesser support for its effect on productivity. Their findings also indicate that satisfaction is enhanced more by a supportive, participative climate than by the opportunity to participate in specific decisions within an organization. This addresses a theme that is at the core of participation research--the opportunity to participate versus the perceived or actual influence associated with participation.

Two assumptions could be made about the supportive, participative climate mentioned by Miller and Monge (1986). First, the lack of opportunity for communicative interaction between an individual and his or her supervisor would limit the amount and type of support that could be offered, hinder the level of participation and, consequently, increase the level of stress. The opportunity for teachers to participate in decision making within their schools has been shown to be negatively correlated with stress, in general, (Brissie, Hoover-Dempsey & Bassler, 1988) and, specifically with job dissatisfaction (Levitov & Wangberg, 1983) and depersonalization (Schwab, Jackson, & Schuler, 1986). The relationship to depersonalization indicates that the less input teachers have in the decision making process within their school the more negative their responses to others become over time.

This lack of opportunity to participate could lead to an increase in individual's uncertainty about where and how he or she fits into the organization. Uncertainty about the organization or one's role within the organization could be ameliorated by increased participation in decision making. Certainty about the requirements of a position are enhanced if one is involved in determining some of the factors that affect that position. Jackson (1983) found that participation reduced role conflict and role ambiguity. Increases in these were positively correlated with emotional stress. Participation was also positively correlated with the individual's sense of perceived influence. In Jackson's study there was a strong correlation (.81) between a staff member's sense of a supportive social environment within the organization and their level of perceived influence within the organization and with their supervisor. Since Jackson saw perceived influence as more central to the process of decision making she dropped social support. This raises the second point to be made about the supportive, participative climate that Miller and Monge found in the literature--opportunity for participation must be linked to influence to impact satisfaction.

This idea is supported by Benson and Malone (1987) who note that teachers in their study perceived themselves as being deprived of <u>influence</u> in both managerial and technical decisions made in their schools. These authors stress that their study focuses on the ability of the teachers to have

influence as opposed to the opportunity to have involvement in decision making activities. They write that teachers report a greater opportunity for involvement than for influence.

Perceived influence is, therefore, a concept that is central to both participation and supervisory support. Using a longitudinal design, Jackson (1983) found that there were differences between the levels of role conflict and role ambiguity reported by subjects in the control groups (no increases in the level of participation) and those reported by the intervention group (increased participation). Jackson suggests, however, "that the benefits of participation in decision making are not manifested immediately" (p. 14). For example, when staff meetings occur regularly and frequently, they may become more meaningful and, therefore, run more effectively. Consequently, she speculates that while there are quantitative differences, there may also be qualitative differences such as changing perceptions of supportive relationships in the workplace.

Thus participation is hypothesized to be an antecedent to the perception of a supportive supervisor. This prediction is supported by the work of Ray and Miller (1989) in which they found that participation in decision making is an antecedent to perceived supervisory support. It is through participation's link to supervisory support that uncertainty reduction associated with role ambiguity is postulated. Participation is, however, predicted to be positively related

to the outcome variable job satisfaction. The more opportunities teachers have for participation in decision making and the greater their level of perceived influence, the more control they will perceive that they have over their jobs and, consequently, the more apt they are to report a greater level of job satisfaction.

Outcome Variables

This last segment of this chapter will address the relationship that exists among the burnout dimensions of emotional exhaustion, depersonalization and reduced personal accomplishment and with the outcome variables of job satisfaction and occupational commitment.

Changes in the burnout variables have been shown to be affected by environmental or situational variables perceived as individually problematic. These burnout variables have been shown, in more recent research, to have an effect on each other (Miller et al., 1990). Miller et al., in their research with caregivers and support staff in a hospital setting, found that depersonalization was an antecedent to both emotional exhaustion and decreased personal accomplishment for caregivers. They suggest that this relationship occurs because of the importance of the client/caregiver interaction in the health care setting. This same relationship can be inferred to exist for teacher burnout due to the centrality of the teacher/student interaction. The further teachers withdraw from those with whom they have the opportunity to interact at school and the more negative

their responses become, the greater their level of emotional exhaustion will be. This same withdrawal can be hypothesized to lead to an increased level of reduced personal accomplishment. This last hypothesis is based on the premise that central to teachers' sense of personal accomplishment are the successful--both productive and pleasant--interactions with their students. If they withdraw from their students, the fewer successful encounters and, therefore, a reduction in their sense of personal accomplishment.

Much of the research on burnout has focused on the relationship between the dimensions of burnout and the outcome variables of employee job satisfaction and commitment to the occupation. Increased levels of emotional stress or exhaustion have been widely indicated as an antecedent to decreased job satisfaction and occupational commitment (Jackson, 1983; Kahn, Wolfe, Quinn & Snoek, 1963; Maslach, 1982b; Miller et al., 1990).

Katz and Kahn (1966) write that ". . . job satisfaction is used loosely to cover overall liking for the job situation as well as intrinsic job satisfaction deriving from the content of the work process." Pines reports that in research with mental health professionals the greater the degree of burnout the more apt they were to stop looking for self-fulfillment in their work and that their "good days" become less and less frequent (p. 20). Consequently, the more burned out a person is the less apt they are to find

satisfaction in their work. For those in caregiving positions emotional exhaustion and depersonalization have been found to be negatively correlated with job satisfaction (Miller et al., 1990).

When individuals enter an occupation they have certain expectations about what it means to them in terms of rewards, both intrinsic and extrinsic. Matteson (1987) writes that the gap between these individual expectations and situational reality is one of degree--the degree to which one's expectations are met or not met by the occupation. If the gap is too broad it can lead to burnout and a lessening of commitment to the occupation. It has been proposed that this reality gap may be broader for those who choose caregiving occupations (Matteson, 1987; Goodlad, 1984). Miller et al. (1990) found that for caregivers emotional exhaustion was negatively correlated with occupational commitment.

These findings have generally been shown to occur for teachers as well. Goodlad (1984) writes that in his research "a large portion (57%) of the prime reasons for entering teaching chosen by these teachers clustered around the nature of teaching itself: the desire to teach in general or teach a subject in particular (22%); the idea of teaching as a good and worthy profession (18%); and a desire to be of service to others (17%)" (p. 171). In addressing why teachers leave the profession, he reports that "If one goes into teaching with expectations of being able to teach and be of service and then is frustrated in realizing these expectations,

dissatisfaction sets in and quitting becomes an alternative" (p. 172). There seems to be a conflict in the values teachers initially associated with the profession and the frustration of those values by the reality of the teaching situation. Schwab et al. (1986) found that teachers who experienced an elevated state of emotional exhaustion reported greater intentions of leaving their job and were shown to have a higher absentee rate. Depersonalization and reduced personal accomplishment were associated with a decrease in effort on the job. In research conducted by Susan Jackson (1983), participation was demonstrated to affect the variables of role conflict, role ambiguity, perceived influence and emotional strain. These, in turn, were related to both perceived employee job satisfaction and intention to leave a job.

In the model presented in this paper, therefore, emotionally exhausted teachers are expected to report a lowered level of job satisfaction and occupational commitment. Additionally, once the teacher has withdrawn from others it is also feasible to assume a negative relationship between depersonalization and job satisfaction as well.

In summary, the model (Figure 1) hypothesized in this thesis illustrates the burnout process in teachers as having its origins in increased workload, role conflict and role ambiguity and being mediated by increases in supervisory support and participation in decision making. This model addresses the impact these variables have on the burnout

indicators of emotional exhaustion, depersonalization, reduced personal accomplishment and subsequently, the outcome variables of occupational commitment and job satisfaction. The next chapter will describe how this model was tested with a sample of elementary and secondary school teachers.

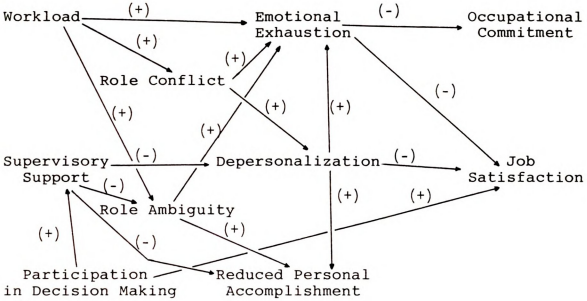

Figure 1

Hypothesized Model of Communication, Stress and Burnout

CHAPTER TWO

Methods

This chapter explains the methods used to assess the relationship between organizational stressors, mediating communication variables, dimensions of burnout and the outcome variables of job satisfaction and occupational commitment. It includes: (1) a description of the sample of those from whom data were drawn, (2) the process of data collection that was used, (3) a description of the survey instrument with a breakdown of the items and (4) analysis of the data.

Sample Description

This study was part of a larger research project. The sample consisted of teachers, administrators and support staff in a mid-size, urban school district in the Midwest. The subjects were employed in elementary, middle, and secondary schools and a center for severely mentally impaired and severely, multiply impaired students. A random, stratified sample of 880 employees was selected as representative of the composition of the district by research and evaluation personnel. This sample had 645 (73%) females and 235 (27%) males. Of these 538 (61%) were teachers. For the purposes of this paper it is this group (teachers) that was of interest.

Two hundred and ninety-eight completed surveys or 34% of the 880 mailed were returned. Of the 538 teachers in the original sample, 182 (34%) responded. The sample of teachers (182) analyzed represents 61% of the final sample of 298. In the original sample of 880, teachers (538) represented 61% of the total. The distribution of teachers in the final sample is representative of the distribution of teachers in the initial sample.

In terms of distribution by grade the original sample was composed of 50% elementary school teachers (271); 42% middle/high school teachers and 2% (11) special education teachers. Of the sample of 182 analyzed 51% were elementary school teachers (92) and 41% were employed in high schools (74). Eight percent indicated they were teachers but did not indicate grade level. Distribution by grade in the final sample, therefore, is also representative of the original sample.

The final sample of administrators, teachers and support staff (298) was composed of 73% females and 26% males and 1% unidentified. Teachers in the final sample were 67% female and 30% male. Five respondents did not indicate their sex. In the original sample of 880 teachers, administrators and support staff, 73% were females and 27% were males. This indicates that the breakdown by sex in the final sample was representative of the original sample.

The total group (298) of individuals who returned their surveys had a mean job tenure of 17.7 years and mean tenure

of 8.6 years at their current school. The subsample of teachers (182) analyzed has a mean job tenure of 19 years and a mean tenure of 9.6 years at their current school. Tenure information was not available for the original sample (880). Teachers in the final sample have, therefore, a somewhat greater level of tenure than the total final sample.

Administration Procedure

The survey was mailed directly to respondents at their homes at the end of the 1988-89 school year. The timing of this mailing may explain the relatively low response rate. Surveys were returned directly to the researchers at Michigan State University. This was done to protect the anonymity of the respondents and to help foster the fact that this was an independent research effort rather than a school district effort.

Instrumentation

The presence of individual job-related stress was measured using self-report data from the subjects. The use of self-report data assesses the individual's perception of the stress versus an objective measure of stress. This is an important distinction given the criticism of self-report data. In the case of stress the argument has been made that the subject's determination of their level of stress is more important than a third party measure (Bacharach, Bauer & Conley, 1986).

The measurement instrument used in this study was a 95 item survey. The variables related to individual perceptions of workplace stressors, interventions (supervisory support, communication) and the burnout process were assessed using the following items:

Burnout

This was measured using the Maslach Burnout Inventory (Maslach & Jackson, 1981). This well-validated measure is comprised of three subscales which ask individuals for their perceptions of their degree of emotional exhaustion, their depersonalization of others and their sense of job-related personal accomplishment.

Participation in Decision Making

The individual's perceptions of their opportunities for participation and influence in the decision making process was assessed using items from the Survey of Organizations developed at the Institute for Social Research at the University of Michigan.

Work Satisfaction and Occupational Commitment

These outcome measures were assessed using the Job Descriptive Index (Smith et al., 1969) for work satisfaction and the adaptation of relevant items on the Organizational Commitment Questionnaire (Mowday, Steers, & Porter, 1979) for occupational commitment.

Social Support

Items from the Caplan, Cobb, French, Harrison and Pinneau Survey (1975), revised to reflect the educational setting, were used to measure social support from three sources: supervisory/principal, co-workers, and family and friends.

Role Overload, Role Conflict and Role Ambiguity

These areas were assessed using a survey instrument developed by Pettegrew and Wolf (1982) to measure the individual perceptions of educators.

Analysis

This section addresses the types of analysis used in the examination of this model. The analysis proceeded in two steps. The first was the evaluation of the measurement models developed to operationalize the concepts that comprise the proposed path model. Secondly, the structural equation model was estimated.

Confirmatory Factor Analysis

The measurement models were analyzed using the confirmatory factor analysis subroutine of the PACKAGE computer program (Hunter & Lim, 1987). The measurement models were defined by an a priori analysis of the item content. The fit of the specified measurement model to the data was then evaluated by comparing the observed correlations between the variables with the correlations predicted by the measurement model. The items should "share common meaning

and conform to the product rules of internal and external consistency" (Hunter & Gerbing, 1982). The criteria, therefore, for confirming the factor structure of each scale is as follows:

1. The content of the items should be homogeneous. This is assessed by checking the face validity of the items to assure that the items fit the underlying construct being measured.

2. The scale should be internally consistent. The items should satisfy the Spearman Product Rule. "That is, the correlation between two items in the same cluster should be the product of their correlations with the underlying trait" (Hunter & Gerbing, 1982).

3. It should satisfy the parallelism requirement. Parallelism refers to the extent to which items in a factor are related in a similar way to other factors.

Path Analysis

A second subroutine of the PACKAGE computer program was used to evaluate the proposed path model. "Path analysis is a procedure for systematically combining the use of partial and multiple correlations to study the causal relations among a set of variables" (Hunter & Gerbing, 1982). This program is a least squares path analysis program. Its output consists of the original correlations, the path coefficients, the reproduced path coefficients, the errors between the original and reproduced correlations and the sum of squared errors. The fit of the model is evaluated by examination of

the errors. Revisions to the model are then done to develop a closer fitting model.

Once a well-fitted model has been developed through the use of the confirmatory factor analysis and path analysis subroutines of the PACKAGE computer program, a final confirmation of the model will be done using the LISREL computer program. LISREL uses full information, maximum likelihood techniques. The output used to assess the fit of the model is the Chi-square estimation of the "goodness of fit" of the model. An insignificant Chi-square indicates a good fitting model. Since Chi-square is sensitive to sample size, the Chi-square, degrees of freedom ratio is also considered along with the Adjusted and Unadjusted Goodness of Fit Indices. At the more micro level of analysis LISREL indicates whether the links specified in the model should be retained and links not specified added. This is assessed by looking at the T-values and the Modification Indices. The T-values look at the significance of the path loadings and the correlation between factors. The Modifications Indices looks at unspecified parameters and indicates the degree to which Chi-square would drop if a parameter was estimated. The amount of variance accounted for by the model is determined by looking at the R-squared values and the Coefficient of Determination.

CHAPTER THREE

Results

This chapter includes the results of the confirmatory factor analysis and the path analysis. Since this research is part of a larger research project the CFA includes all of the subjects in the sample (298). Because the model under analysis deals only with the process of teacher burnout, the path analysis was run on only the teachers (N = 182). The use of the larger sample size for the CFA, however, accomplishes two things: (1) lower levels of sampling error should provide more stable estimates of parameters within the measurement model and (2) it allows for comparison across groups at a later date.

Confirmatory Factor Analysis

Confirmatory factor analysis was used to determine the dimensionality of the measurement scales used to assess work load, role conflict, role ambiguity, participation in decision making, supervisory support, emotional exhaustion, depersonalization, reduced personal accomplishment, job satisfaction and occupational commitment. A 12 item scale from an instrument developed by Pettegrew and Wolf (1982) to assess teacher workload was initially analyzed. Due to lack of internal consistency and low factor loadings 6 items were dropped. A 6 item solution was achieved which proved to

have strong internal consistency and parallelism. These remaining 6 items dealt primarily with issues that are part of the job of being a teacher but not necessarily with the process of teaching. For example, "Trying to complete reports and paperwork on time causes me a lot of stress" and "I find that dealing with student discipline problems puts a lot of stress on me." Scale items, factor loadings and reliabilities are presented on Table 1.

Of a 5 item scale measuring role conflict (Pettegrew & Wolf, 1982) 1 item was dropped. This item did not discriminate between conflict and workload and loaded almost equally on both factors. Role ambiguity was evaluated using a 5 item scale (Pettegrew & Wolf, 1982). A 4 item solution which was internally consistent and parallel was achieved by dropping 1 item. This item assessed the teacher's ability to predict what will be expected of him/her on the next day. This is somewhat different from the other 4 items which focus on the teacher's understanding of: (1) the scope if his/her responsibilities and (2) the criteria used to evaluate their performance. Items, factor loadings and reliabilities for these scales are provided in Table 1.

Two communication scales were predicted--participation in decision making and supervisory support. These, however, were found to be strongly correlated (.89) and, therefore a 1 factor solution was evaluated. The combined factor had 4 items from the participation in decision making scale and 3 from the supervisory support scale. All of these items

focused heavily on communication with the supervisor and influence in the decision making process. The resulting scale was internally consistent, parallel with outside factors and had a reliability of .93. The factor loadings for the items in this factor are presented in Table 1.

Items from the Maslach Burnout Inventory were used to assess emotional exhaustion (9 items); depersonalization (5 items); and reduced personal accomplishment (8 items). Four items were dropped from the emotional exhaustion scale resulting in a 5 item solution.

Difficulties arose in obtaining a unidimensional scale for depersonalization. Three of the items related to depersonalization of students and one of the others to depersonalization of others (not students) and the last one to the depersonalizing impact of the job on teachers. A scale that was internally consistent and parallel was obtained by dropping the items not related to students. This final scale is consistent with the idea that client interaction pays a critical part in the teacher burnout process. The resulting scale proved to be internally consistent and parallel with a reliability of .65.

Three items were dropped from the reduced personal accomplishment scale leaving a 5 item scale. Examination of the remaining items indicated that contextually they were similar. They focus on the academic accomplishments of teachers with their students and their sense of positive influence. This scale was internally consistent with the

exception of a .11 ($p > .05$) correlation between the 2 strongest items. The items, factor loadings and reliabilities for these scales are included on Table 1.

Job satisfaction was measured using the 18 item Job Descriptive Index developed by Smith, Kendally and Hunter (1969). A 5 item scale was finally arrived at which was internally consistent and parallel. The items dropped were determined by low factor loadings and the impact of the items on the internal consistency of the scale. Reviewing the items dropped, it is interesting to note that items such as fascinating, creative, respected and challenging as well as routine, boring, simple and tiresome dropped out. The remaining items were satisfying, good, pleasant, useful and gives a sense of accomplishment. Factor loadings and the reliability for this factor are on Table 1.

The original occupational commitment scale consisted of 6 items adapted from Mowday, Steers and Porter's Organizational Commitment Questionnaire. Three items were dropped resulting in a 3 item scale which was internally consistent and parallel. These 3 items addressed the value teachers' placed on their occupation; the similarities between their values and those of their occupation and ability of their occupation to inspire exceptional job performance. Factor loadings and the reliability for this factor are on Table 1.

Table 1

Scale Items, Factor Loadings, and Reliabilities

Item	Factor Loading
Role Conflict (Alpha = .78)	
1. I receive conflict demands from two or more people or groups in the school setting.	.75
2. I often have to buck a rule or policy to carry out an assignment.	.79
3. I am given school-related duties without adequate resources and materials to carry them out.	.61
4. There is a difference between the way my administrative head thinks things should be done and the way I think they should be done.	.59
Role Ambiguity (Alpha = .77)	
1. I am unclear on what the scope and responsibilities of my job are.	.70
2. I am uncertain what the criteria for evaluating my performance actually are.	.64
3. I receive enough information to carry out my job effectively.	.68
4. When asked, I am able to tell someone exactly what the demands of my job are.	.66
Work Load (Alpha = .74)	
1. I feel constant pressure from others to improve the quality of my work.	.47
2. Trying to complete reports and paperwork on time causes me a lot of stress.	.58
3. I find that dealing with student discipline problems puts a lot of stress on me.	.57
4. Complying with state, federal and school rules and policies is very stressful.	.61

Table 1 (cont'd.)

Item		Factor Loading
5.	I experience a lot of stress trying to resolve conflicts between parents and the school.	.63
6.	Having to participate in school activities outside of the normal working hours is very stressful to me.	.57
Emotional Exhaustion (Alpha = .89)		
1.	I feel emotionally drained from my work.	.87
2.	I feel used up at the end of a workday.	.80
3.	I feel fatigued when I get up in the morning and have to face another day on the job.	.73
4.	I feel burned out from my work.	.85
5.	I feel frustrated by my job.	.68
Depersonalization (Alpha = .65)		
1.	I feel I treat some students as if they were impersonal "objects".	.60
2.	I really don't care what happens to some students.	.71
3.	I feel the students blame me for some of their problems.	.54
Personal Accomplishment (Lack of) (Alpha = .69)		
1.	I deal very effectively with the problems of students.	.55
2.	I feel I'm positively influencing other people's lives through my work.	.61
3.	I can create an academically focused atmosphere with the students.	.51
4.	I feel exhilarated after working closely with the students.	.39

Table 1 (cont'd.)

Item	Factor Loading
5. I have accomplished many worthwhile things in my job.	.67
Work Satisfaction (Alpha = .80)	
Do the following words describe your work:	
1. Satisfying	.77
2. Good	.68
9. Pleasant	.62
10. Useful	.60
18. Gives a Sense of Accomplishment	.69
Occupational Commitment (Alpha = .72)	
1. I believe I've chosen the best of all possible occupations to work in.	.58
2. I find that my values and the values of my occupation are very similar.	.69
3. My occupation really inspires the very best from me in terms of job performance.	.76
Supervisory Support (Alpha = .93)	
1. It is easy to get my ideas across to my supervisor/principal if I have a suggestion.	.76
2. When decisions are being made at this school, the persons affected are asked for their ideas.	.79
3. Information is widely shared at this school so that those who make decisions have access to such knowledge.	.82
4. At this school, decisions are made at those levels where the most adequate information is available.	.82

Table 1 (cont'd.)

Item		Factor Loading
5.	My principal goes out of his/her way to make my life easier for me.	.82
6.	It is easy to talk with my principal.	.82
7.	My principal can be relied on when things get tough at work.	.83

Preliminary Path Analysis

After the factor structure of the measurement model was confirmed, a correlation matrix was run using the PEARSON CORR subroutine of SPSS-PC. This correlation table was then corrected for attenuation due to measurement error using the reliabilities from the confirmatory factor analysis. These corrected correlations were the basis for the path analysis. The initial correlations along with the means and standard deviations and the corrected correlations used in assessing the fit of the model are included in Table 2.

Path Analysis

The original model (Figure 2) proved to be a poor fit to the data. There were two nonsignificant path coefficients; several residuals of questionable proportions and a sum of squared error of 2.327. The Chi-square analysis did not indicate a good fit of the model (computed X^2 = 568.38; required X^2 = 28.87/df = 18, $p > .05$). In examining the residuals it became apparent that the following paths were underrepresented in this model: (1) Supervisory support to Reduced Personal Accomplishment (2 to 7) = path coefficient of .09; residual error, -.12; (2) Depersonalization to Emotional Exhaustion (5 to 6) = path coefficent of -.02; residual error .12. These links were dropped.

The residual errors were then analyzed and based on the amount of error associated with a linkage, decisions were made on whether to drop that link. A final model (Figure 3) was arrived at in which the path coefficients were

significant, the squared error was decreased to .165 and the average squared error was .007. The Chi-square analysis indicated a good fit of the model (computed X^2 = 30.; required X^2 = 30./df = 19, p > .05).

The following links were dropped from the original model: (1) Work Load was not associated with Role Ambiguity, (2) Role Ambiguity did not prove to be an antecedent to Emotional Exhaustion, (3) Depersonalization was not found to be a cause of Emotional Exhaustion nor was it linked to Job Satisfaction and (4) The link from Participation in Decision Making to Job Satisfaction dropped out when it was combined with Supervisory Support. The following links were added: (1) Workload to Depersonalization, (2) Role Conflict to Role Ambiguity, (3) Role Ambiguity to Depersonalization, (4) Reduced Personal Accomplishment to Job Satisfaction, and (5) Job Satisfaction to Occupational Commitment.

The analysis of the final model using LISREL indicated the following. The goodness-of-fit index is .871 (adjusted = .747). The Chi-square to degrees of freedom ratio is 7.6. This is somewhat larger than the recommended limit of 5. Only 4% of the normalized residuals were greater than 2.0. The coefficient of determination and R-squared values indicate that a substantial amount of the variance is accounted for by the final model--role conflict (R-squared = .586), role ambiguity (R-squared = .530), emotional exhaustion (R-squared = .425), depersonalization (R-squared = .356), reduced personal accomplishment (R-squared = .679),

job satisfaction (R-squared = .717), occupational commitment (R-squared = .694). The modification indices indicate that the Chi-square estimate would be improved by an addition of a link between role conflict and reduced personal accomplishment. A revision with this link was computed. It, however, produced modifications calling for feedback loops from job satisfaction to reduced personal accomplishment and emotional exhaustion to reduced personal accomplishment. While the idea that there could conceptually be feedback loops is feasible, the current model is accepted with the suggestion that in the future researchers may want to explore this area.

Table 2

Correlation Matrix @

Items	1	2	3	4	5	6	7	8	9
1	--	-.25	.59	.36	.60	.45	.45	-.40	-.47
2	-.21	--	-.62	-.59	-.35	-.21	-.34	.46	.41
3	.45	-.53	--	.70	.56	.49	.43	-.63	-.56
4	.27	-.50	.54	--	.45	.49	.73	-.67	-.65
5	.49	-.32	.47	.37	--	.35	.49	-.66	-.66
6	.31	-.16	.35	.35	.27	--	.69	-.47	-.49
7	.32	-.27	.31	.53	.38	.46	--	-.69	-.80
8	-.29	.38	-.47	-.50	-.53	-.32	-.48	--	.83
9	-.36	.35	-.44	-.51	-.56	-.35	-.59	.63	--
Means	18.09	20.88	11.80	8.65	16.04	6.70	10.76	10.48	11.91
S.D.	4.5	6.9	3.8	3.1	5.2	2.6	2.6	2.6	3.9

Key:

1. Workload
2. Supervisory Support
3. Role Conflict
4. Role Ambiguity
5. Emotional Exhaustion
6. Depersonalization of Students
7. Reduced Personal Accomplishment
8. Occupational Commitment
9. Job Satisfaction

@ Correlations in the lower half of the matrix are uncorrelated for attenuation; corrected correlations appear in the upper half.

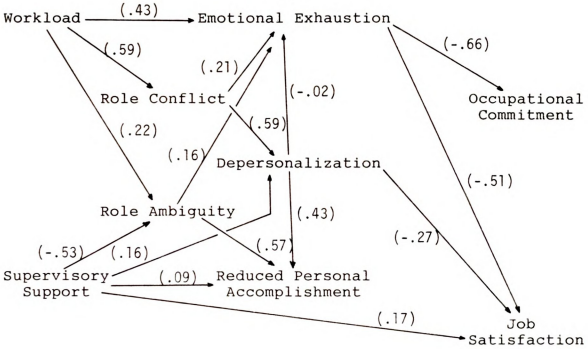

Figure 2

Hypothesized Model of Communication, Stress and Burnout With Path Coefficients

*Coefficient significant, $p < .05$

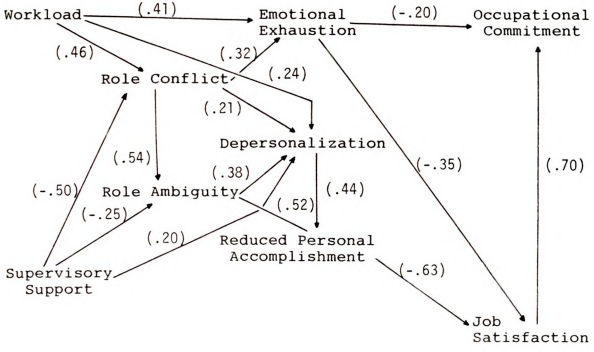

Figure 3

Final Model of Communication, Stress and Burnout

All Coefficients Significant, $p < .05$

CHAPTER FOUR

Discussion

This chapter includes a discussion of the findings from the measurement model and the path model. In the measurement model, while most of the scales were confirmed in a fairly standard fashion, two scales are of particular interest--supervisory support and depersonalization. These will be discussed in the measurement section. In the path analysis section the total interaction of the final path model will be discussed.

Measurement Model

The high correlation between the items in the participation in decision making scale and the supervisory support scale resulted in testing a unidimensional scale. The findings suggest that the level of perceived influence in decision making may play a key role in an employee's sense of supervisory support. As discussed earlier there is a major difference between opportunity for involvement in the decision making process and the level of influence this opportunity provides. Supportive supervisors would seem to be those who are not only interested in a person's work; concerned enough to show affective supportive but are also receptive to the ideas of subordinates and able to act upon those ideas. In essence, these supervisors allow

teachers to become influential in the educational process. This indicates that supervisory support and participation in decision making are not as distinct as has been assumed.

The second measure of particular interest was the depersonalization scale. While the majority of the items in this scale have a client focus, two are not directly aimed at the teacher's concern for depersonalizing students. These two items were dropped from the measurement model. The items that remain are, as noted earlier, consistent with the idea that student interaction is critical to the burnout process of teachers. Maslach (1982b) suggests that while the "development of this detached, callous and even dehumanized response" (p. 4) known as depersonalization may start with one's clients it can progress until it effects one's relationships with others who are important in one's life as well. When thinking about the order in which burnout in teachers occurs, however, it seems logical that the workplace depersonalization process for teachers may happen in two stages with the final stage being the depersonalization of students. This would suggest that this process starts with teachers isolating themselves first and, additionally, from their supervisor and co-workers and, as a last desperate attempt to shield themselves from burnout, from their students. Teachers work, from their first day on the job, in relative isolation from each other with limited opportunities for professional or social interaction and in almost constant contact with their students. The job

requirements and limitations that come from outside of the classroom are, however, a source of stress. As noted by Goodlad (1984), teachers enter the profession because of inherent professional values. These values are central of the role of being a teacher and working with students. Two important issues that need to be addressed in association with the process of depersonalization as a way to control burnout are:

1. How would a teacher go about isolating him/herself as way to control burnout?

2. Which causes the initial burnout process, disillusionment with the system and the others in it or the children?

Path Model

The revised model indicates that overload is, indeed, a major source of stress. It is most strongly correlated with role conflict (.46) and emotional exhaustion (.41), but also accounted for increases in depersonalization of students (.24). These are rather logical connections. As workload increases, either in quantity or complexity, the probability that a teacher will receive conflicting demands from supervisors and clients also increases. This heightened workload will be a source of exhaustion, physical as well as emotional. Of special interest is the impact on depersonalization of students. As their responsibilities increase or their student load increases, teachers will

either spend less time with individual students or start to distance themselves psychologically from them.

Both role conflict and role ambiguity have an impact on the burnout variables (emotional exhaustion, depersonalization, and reduced personal accomplishment). Of the role related stressors, role conflict is sole predictor of emotional exhaustion (.32). Role ambiguity, on the other hand, is the only predictor of reduced personal accomplishment (.52). Both role stressors are antecedents to depersonalization with role conflict having a path coefficient of .21 and role ambiguity .38. These findings are consistent with previous research (Schwab & Iwanicki, 1982). Of particular interest is the link that predicts that the greater the role conflict experienced by a teacher the greater the level of role ambiguity will become. The more demands a teacher receives or perceives he or she receives the less able they become at sorting out what their responsibilities are and, concurrently, what the criteria are for measuring their successful accomplishment of those responsibilities. This reflects the difficulties that arise for teachers because of the multiple and sometimes conflicting expectations that exist for schools. Goodlad (1984) concludes, in assessing the expectations that exist for schools beyond academics, that "those associated with schools are not united in and consumed with a common, pervasive, educational mission" (p. 71).

As a way to counterbalance the effect of increased workload, increases in supervisory support are shown in this

model to lessen the effects of both role ambiguity (-.25) and role conflict (-.50). The findings are not consistent with the initial hypothesized lack of relationship between supervisory support and role conflict. Supervisory support was not predicted to mediate role conflict because of the assumption that the principal would have limited impact on the more substantial educational changes that might be associated with role conflict. The final model indicates, however, that supervisory support has a stronger effect on role conflict than on role ambiguity. A teacher's perception of role conflict is lessened by support from their supervisor. Stress reduction may be linked to teachers' influence with their supervisors and the supervisor's ability to influence more concrete issues rather than provide just affective support. The link hypothesized between supervisory support and role ambiguity did not, however, drop out. Support that can help teachers more clearly define their role in the educational setting lessens their sense of role ambiguity.

The assumption that principals would be limited in the instrumental support they could provide teachers; the finding that supervisory support lessens role conflict and role ambiguity all point to the multidimensional nature of support. Social support has been purported to break out into three separate categories--emotional, cognitive or informational and instrumental. The multidimensionality of this concept and the difficulty that comes about in trying to separate these dimensions increases the difficulty of

clearly and concisely studying it. When a principal's support reduces a teacher's role conflict is that instrumental support, informational support, emotional support or, perhaps, all three? Is the type of support contingent on the situation? Are principals limited in the type of support they can offer? If so, what effect does this limitation have on the burnout of teachers? Is one type of support more important than another in the burnout process? These are the types of questions that muddy the research in this area and call for more research to sort out the specific relationships.

Something to be kept in mind, however, is that while supervisory support is shown to act as a buffer to stress, the literature indicates that the educational level and professional autonomy of this population may lessen the impact of supervisory support. Marcellissen et al. (1988) in their research report that supervisory support is less important to higher occupational groups than lower occupational groups.

Supervisory support is also positively related to depersonalization (.21). In the original correlations these variables are negatively correlated (-.21). Supervisory support was perceived as lessening depersonalization. When the model was developed, however, the negative correlation was suppressed by the impact of the load and role variables (workload, .45; role conflict, .49; and role ambiguity, .49) on depersonalization. The relationship proposed by the

model is that as teachers experience increases in the level of supervisory support they increasingly withdraw from students.

Another possibility to be considered, however, is that when teachers reach the stage at which they have become the object of supervisory concern for whatever reason and, therefore, the object of a great deal of attention from their supervisors they are more apt to be depersonalizing their students. The question that must be asked, however, is why this support leads to further depersonalization. One possibility is that principals, in an attempt to be supportive, are commiserating with teachers by sharing "war stories". Rather than addressing the issues associated with why the teacher feels the need to depersonalize their students and how these issues may be remedied, this support may only serve to further confirm for the teacher that life in the classroom is bad and what they are experiencing is normal. Consequently, supervisory support may increase in quantity but be of a type that further exacerbates the burnout process.

Of the burnout variables depersonalization seems to be at the core of the burnout process. It is, as mentioned above, positively linked to increases in role conflict, workload, role ambiguity and supervisory support. Depersonalization is characterized by negative responses to others, increases in irritability and a lessening of idealism (Maslach, 1982b). Jackson et al. write that there are not only quantitative

differences in client contact (the number of client contacts) but also qualitative. Depersonalization, they suggest "may occur in jobs at either extreme more than for jobs characterized by intermediate amounts of interpersonal distance" (Jackson et al., 1986, p. 638). Since the teacher's position falls within the extreme area mentioned by Jackson, the connection between depersonalization and reduced personal accomplishment (.44) is to be expected. As teachers feel distanced from their students their sense of personal accomplishment is diminished.

What was not confirmed by this model was the predicted link between depersonalization and emotional exhaustion. While emotional exhaustion and depersonalization have common antecedents (workload and role conflict) they are not predictors of each other. The greater the workload (both in quantity and quality) and the greater the perceived role conflict, the more frustration and emotional and physical fatigue a teacher feels. As hypothesized, emotional exhaustion seems to separate out as a distinct predictor of lessened degrees of job satisfaction (-.35) and occupational commitment (-.20).

Of the other burnout measures, depersonalization was predicted to directly lead to decreased job satisfaction. This was not confirmed in the analysis. Depersonalization is indirectly linked to job satisfaction through reduced personal accomplishment which was found to be causally antecedent to job satisfaction. Logically as teachers

become more distant from their students and their sense of personal accomplishment decreases so does their sense of job satisfaction.

One additional link that emerged from the analysis is a rather substantial (.70) correlation between job satisfaction and occupational commitment. This connection certainly makes sense. A lessened sense of job satisfaction leads teachers to assume that the values they associate with teaching and education are not consistent with those required for the actual occupation.

In general, a number of themes emerge from this model. The first of these is the idea that depersonalization of students is a key link in the burnout process. The impact of depersonalization and role ambiguity on reduced personal accomplishment and indirectly on job satisfaction presents a picture of teachers who have become uncertain about their roles, have started to distance themselves from their students and, therefore, feel that they are not accomplishing what they want to and are, consequently, not satisfied with their jobs. As their job satisfaction is lessened so is their commitment to the occupation of teaching.

Secondly, overload, whether quantitative or qualitative, is not only directly related to two of the burnout dimensions (emotional exhaustion and depersonalization) but is also a contributor to the conflict teachers associate with their roles. Workload and conflict imply, in one sense, the more concrete aspects of the jobs such as the number of students

and the number of conflicting assignments. Through increases in these more concrete aspects teachers become emotionally exhausted and indirectly experience a reduction in their satisfaction and their commitment to the values of their occupation.

Last, the role of support communicated by the supervisor is confirmed as a moderating force in the burnout process. As has been discussed, however, the issue of support is not clearly defined and the interaction of participation in decision making and supervisory support has not been either successfully redefined or differentiated.

In closing, issues related to these research findings that have implications for future research and by extension, practical application will be briefly addressed.

The collapse of the participation and supervisory support scales into a unidimensional scale emphasizes the exchange of information and the degree of influence the teacher has with the supervisor. It points to the need to focus in burnout research on participation in decision making as a level of influence rather than just as an opportunity to participate. Rather than being a mediating factor to the burnout process, the opportunity to participate in organizational decision making without the assumption of influence may actually lead to a greater level of burnout. Teachers indicate that they are reluctant to become involved in the decision making process because involvement did not bring with it any meaningful influence (Benson & Malone,

1987). It would be interesting to test scales that attempt to break out these separate and, perhaps, contradictory pieces.

Another aspect of this relationship that would be interesting to investigate is the relationship that exists between the supervisor's sense of influence on substantial issues that effect the school and the teacher's perception of their supervisor as a mediator in the stress process. Having influence with a supervisor who doesn't perceive that they have the opportunity or ability to effect change may also be another avenue of increased stress.

Of both research and practical interest is the sequencing of the depersonalization process. Practically, if one is interested in developing an intervention strategy it would seem heuristically valuable to be able to measure depersonalization of supervisors and co-workers and depersonalization of students as separate indicators of burnout. The intervention process may be dramatically different for individuals in the initial stages than for those who have reached the point of withdrawing from their students. Of research interest is the further clarification of the causal sequence that this indicates in the burnout process.

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