THE WORK ENVIRONMENT AND BURNOUT
AMONG FAMILY AND CHILD CARE WORKERS
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ABSTRACT

This thesis explores the relationship between work environment and burnout by examining the question: Do workers experiencing burnout see their work environment more negatively than co-workers who are not burned-out? The goal is to explore the potential usefulness of measures of work environment and burnout to guide efforts at burnout intervention and prevention. Thirty-nine family and child-care workers from five sites in the Vancouver area responded to a survey to test hypotheses addressing this question. The work environment and burnout were found to be highly interactive with the work environment variables of supervisor support and clarity identified as key factors in burnout. The Maslach Burnout Inventory and Moos (1981) Work Environment Scale were found to be useful instruments for intervention and future research.
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This thesis and research was sparked by an interest in work environments and a concern over recent developments in British Columbia where the delivery of preventative and residential programs has increasingly been contracted out to the private sector. These service delivery areas are known as occupations at high risk for burnout and few studies have looked at staff working in these new "privatized" environments. Hopefully this study represents a first step in this direction.

A number of colleagues have helped make this work possible. I would like to thank my fellow students this year for their interest and feedback. Also the staff of the Social Work Library for their cheerful help in digging up the material for the research. I want to thank Professor Chris McNiven for her help in developing the theoretical framework and her suggestions for intervention and Professor John Crane for his patient methodological feedback and guidance with the research technology. I also want to thank my wife, Loraine Littlefield, for her editing and support through this exciting and productive year.
Chapter I - Introduction

A. Background to "Burnout"

Over the past twelve years, the term "burnout" has earned a place in the English language and is now used by workers in many occupations to capture some difficult-to-describe malaise of workers ranging from disenchantment with the work situation to physical tiredness. However, despite its popular usage, burnout has most commonly been defined as a problem for workers in social service occupations. It is within these occupations that individuals committed to the ideal of helping others and making the world a better place have most often suffered the direct and agonizing consequences of alienation from their work and faced a self-inflicted litany of guilt-provoking questions. Typically these included: "How can I feel this bad, I'm working at what I've always wanted?...I don't deserve my paycheck, I walk around like a zombie, I'm not helping anyone.....What if my supervisor finds out?"

The concept of burnout has provided a legitimate explanation for these feelings and consequently reduced the additive consequences of isolation and guilt. It has become an acceptable occupational hazard of the social services and perceived as a problem on which both employers and employees could work.
Nevertheless, the acceptance of burnout has exceeded its development as either a researchable concept or an identifiable syndrome for treatment. This study will review the substantial literature on burnout with the aim of developing an conceptual framework that is consistent and apply this theory to researching an approach to intervention useful to frontline administrators and supervisors in the social services.

B. Definition of Burnout

The research exploring burnout has been hampered by the lack of a single accepted definition of the concept. Berkley Planning Associates (1977) exhaustively reviewed the literature on job satisfaction and the philosophical concept of alienation and connected this work with the concept of burnout. They concluded that the classic concept of alienation is closest to the modern concept of burnout. Alienation means "separated from" therefore, burnout means alienated or separated from the purpose of one's work.

Karger (1981), a Marxist scholar, also considered burnout to be a modern version of the classic concept of alienation. He argued that dominant political ideology shapes the framing of research questions and the specifics of operationalized definitions of concepts such as burnout. Most definitions of burnout place the phenomenon at the level of the individual and thereby conceal the role played by the structured inequities within society.
Maslach (1982:3) considers burnout to be one type of job stress which is unique in that it arises from the social interaction between helper and recipient. Maslach believes burnout is multifaceted and consists of at least three fairly independent components (Emotional Exhaustion, Personal Accomplishment, and Depersonalization). Emotional Exhaustion refers to feelings of being worn down and fatigued by work while Depersonalization describes the development of dehumanizing or cynical feelings toward clients. The Personal Accomplishment component of burnout is the experience of feelings of the loss of a sense of accomplishment in the work.

Meier (1984) defines burnout as a state resulting from repeated work experiences in which individuals expect few rewards and considerable punishment in their job, little control of reinforcement, or little personal competence in obtaining reinforcement. Meier's definition is a restatement of Maslach's definition in behavioral terms.

For this study, burnout is broadly defined as a condition of disengagement from one's work affecting workers in professional helping roles. Thus, burnout is distinguished from syndromes of occupational stress and job dissatisfaction by being solely a problem affecting "professional people-helpers". Secondly, burnout is not simply physical or emotional fatigue nor any other single symptom but is the loss of contact with the personal
altruistic ideals which motivate those employed in the helping professions.

C. The Implications of Burnout in the Social Services

Burnout has been acknowledged as a widespread (Borland, 1981), pervasive (Leiter & Meechan, 1986), and serious (Daley, 1979) problem. Research has documented the prevalence of burnout among administrative, direct-care professional, and direct-care para-professional workers and has determined that, at any given time, usually about 15% are highly burned-out (Weinberg, Edwards, & Garove, 1983). These figures are averages for large samples and are highly variable, different work settings vary widely in levels of burnout (Weinberg et al., 1983).

Staff working in child welfare have repeatedly been identified as a group particularly at risk for burnout (Daley, 1979; Falconer & Hornick, 1983; Harrison, 1980; Jayaratne, Chess, & Kunkel, 1986). For child welfare workers much of the stress leading to burnout stems from having to make complex, life or death decisions with little concrete information while for other social service workers, the stress comes from having to deal with large numbers of clients making extreme demands (Maslach, 1982).

In addition to those directly suffering from its effects, burnout has consequences for the consumers of social services, agency supervisors and administrators, and society. As well, burnout is a specific occupational hazard
of all types of social work and as such is an issue which concerns every member of the Social Work Profession.

Consumers of social services are one of the sources of burnout and the group which suffers the greatest hardship as a consequence. Burned out child welfare workers may apprehend children without investing extra energy to find difficult solutions or fail to identify the child truly at risk. Burned out financial assistance workers may grow callous and cynical toward recipients eroding already diminished senses of self-worth. Burned out youth counselors may give up on difficult clients and so forth.

Social work supervisors and agency administrators are doubly affected. They must try to reduce and prevent burnout in their staff while being acted upon by the same forces (sometimes magnified) which lead to burnout in their employees.

Finally, in a time of diminishing resources and increasing public scepticism about the value of social services, any obstacle to effective service delivery poses a threat which goes beyond immediate consequences. In short, the survival of present levels of social services require demonstrable, effective service delivery.

D. Responses to Burnout

The response to burnout as a problem in social service delivery systems has been diverse and multi-focused. The focus for intervention has been based on the assumed cause.
Initial approaches to intervention were directed at treating individual burnout victims. Freudenberger (1982) is the chief spokesperson for this level of intervention which is generally reserved for workers in severe stages of burnout.

Most of the intervention literature produced in the late 70's and early 80's explored the use of burnout workshops to treat groups of staff (Edelwich & Brodsky, 1980; Pines & Aronson, 1983). The proponents of workshops took a more preventative approach in that the goal was not to treat victims but to equip workers to cope with work stress. An extension of this preventative approach trained neophyte child welfare workers before going on-line (Falconer & Hornick, 1983).

Hunnicutt & MacMillan (1983) evaluated the effectiveness of burnout workshops and found that actively involving workers in program development and decision making was a more powerful preventative agent than workshops alone.

The latest area of intervention has focused on the environment. Environmental attributes studied have included work roles and role conflict (Harrison, 1980; Maslach, 1982; Ryerson & Marks, 1982); interactive and interpersonal factors (Forman, 1983; Goroff, 1986; Pines, 1983; Randolph, 1982; Scully, 1983); supervisory and management processes (Berkley Planning Associates, 1977; Bramhall & Ezell, 1981; Davis & Barrett, 1981; Shapiro, 1982); and organizational structures (Golembiewski, 1982; Golembiewski & Munzenrider,
The aspects of the work environment associated with burnout have ranged from objective features such as hours, workload, and type of task (Berkley Planning Associates, 1977) to broad ideological influences from the larger social environment (Karger, 1981; Woodsworth, 1983). This study is aimed at examining the attributes of the perceived social environment. This social work-environment is the immediate micro-environment created by co-workers involved in social interaction.

Moos (1981) has devised an instrument, the Work Environment Scale (WES), for measuring the "social climate" of various environments including the work environment. The WES measures ten work environment variables grouped into three categories, relationship dimensions, personal growth dimensions, and system maintenance and system change dimensions. By measuring the perceived work environment, the WES focuses on the immediate, experienced, social micro-environment of the work place.

E. Purpose of the Study

Previous research (Berkley Planning Associates, 1977; Golembiewski et al., 1983; Koran, et. al., 1983; MacMillan & Hunnicutt, 1983; Parkes, 1982; Rosenthal, Teague, Retish, West, & Vessell, 1983; Savicki & Cooley, 1987; Weinberg et al., 1983) has shown that levels of staff burnout and
features of the work environment are related. Nevertheless, these sets of relationships have not been fully explored in the settings with which this study is concerned. Therefore, the goal of this study is to explore the correlation between two multifactorial measures, one of burnout and the other of dimensions of the micro social working environment thought to be related to burnout. From this exploratory analysis, it is hoped to extract two kinds of implications:

1. Possibilities for intervention in the work environment to reduce burnout.

2. Feasibility of using measures of these two sets of variables for periodic assessment of burnout in the agencies studied.

H. Limitations and Value Assumptions

Two major constraints have limited the scope of this study. Chief among these was the short span of time available. Burnout research has reached a plateau where any significant advances must come via thorough longitudinal work. A longitudinal methodology was unfeasible in the ten months permitted to conduct the study. Hopefully, the cross-sectional design utilized in this study will provide a sound starting point for future longitudinal research.

More time would have allowed an examination of attributes of the work environment accessible only to a more in-depth, qualitative methodology. This information might have included absenteeism, sickness rates, and employee
performance evaluations. Likewise, a richer description of burnout could have been obtained by observing workers' behavior (Are they treating clients as objects and presenting as emotionally exhausted?) and with interviews (Where do you stand in relation to your clients, e.g., how responsible are you for their improvement of failure to improve?).

The limited time available to conduct this study precluded any attempt to get at causal relationships between work environment and burnout. However, the focus of this study is to explore the relationship between work environment and burnout with the goal of providing information to guide intervention. Consequently, if a particular work environment characteristic is shown to be correlated with burnout and is subject to manipulation, then it is logical to work with staff on that environmental characteristic as a constructive way of responding to burnout.

Another limitation is the relatively small sample size and the fact that it was not randomly drawn. A decision was made that it was more important to obtain 100% response rates from teams to allow within-team comparisons than to obtain a random sample of the population. Again, the time available precluded the selection of a larger sample.

A final limitation relates to the study methodology. Results were sought from complete teams of workers meaning that the significance tests used in the data analysis must
be viewed with caution. Tests of significance assume the "independence of observations" and this cannot be guaranteed when results from whole work teams are used instead of a random selection of individuals.

A number of value assumptions have guided this research. First among these is an optimism which refuses to accept any human phenomena as either uniformly or simplistically negative. This value, coupled with past experiences helping workers work through, integrate, and learn from their experiences of burnout, precluded a view of burnout as a static, purely pointless end-state. Burnout is always viewed in a developmental context; as a step or transition to something else with a message for the worker making the journey.

A second value influencing this study derives from the researchers experience with groups. This is an intuitive faith in the notion of a social gestalt, that is, that any group of individuals forming an interactive social system constitutes a whole greater than the sum of its parts. The influence of this bias will be obvious throughout the thesis.

A final value assumption is reflected in the sample choice. The researcher has worked many years in paraprofessional roles as a child care and family worker. In general these occupations are low paid, low status, and involve a high level of intensive client contact. As such,
they are jobs where burnout is a daily, ongoing fact of life.

I. Organization of the Thesis

Chapter I outlines the problem area, defines burnout, describes the extent of burnout and those affected, states the purpose of the study, notes the limitations and value assumptions in the work, and provides an overview of the thesis.

Chapter II reviews the relevant literature on burnout and discusses views of burnout developed from moral-religious, Marxist, and existential perspectives. As well, important recent research is reviewed.

Chapter III describes the research problem and the theoretical formulation used to guide the research, states the hypotheses, and discusses the limitations of the study. A two and three dimensional framework for viewing burnout is presented drawing upon the alternate perspectives developed in Chapter II.

Chapter IV details the research design utilized. Research methodology is described including sampling, data collection, and data analysis.

Chapter V provides the research findings and discusses their relevance to the hypotheses.

Chapter VI summarizes the study and conclusions and discusses the implications for future research and intervention.
Chapter II - Literature Review

A. Origins of "Burnout"

The modern usage of "burnout" began in the mid 1970's when Freudenberger (1974) introduced the term to describe a condition he observed among dedicated staff working in the free clinic movement. He noticed that bright, enthusiastic volunteer social service staff were becoming frustrated and cynical and that many were either working frantically and getting nowhere or were "dropping out" and turning to drugs. He has continued to refine the concept and develop individual treatment strategies from a psychoanalytic perspective (Freudenberger, 1975, 1977, 1980, 1982). Freudenberger (1982:174) has concluded that: burnout is not a mental disorder in the usual sense; most burned-out professionals will respond quickly to brief, focused, reality-oriented counselling without drug therapy; and most cases of burnout are curable therefore it is cheaper to salvage than replace burned-out professionals.

Maslach (1976, 1978a, 1978b, 1982) incorporated a broader analysis than Freudenberger and is generally credited with introducing an environmental perspective. While Freudenberger tended to look for attributes of individuals which might predispose them to burnout, he did not emphasize environmental factors even though "contact with people" was implicit in his concept. Other
psychologists working in the field in the early 70's (Pines & Kafry, 1978; Pines & Maslach, 1978) assumed an important role for the environment but were mainly occupied with describing burnout and devising means to measure it. Maslach was one of the first researchers to explore the underlying dimensions of burnout and conduct empirical work beyond the descriptive level (Perlman & Hartman, 1981).

B. The Moral Religious Paradigm

Cherniss (1986) suggests a moral-religious paradigm as an alternative to the scientific-technical paradigm for understanding burnout. Viewed from this perspective, "what we often refer to as burnout is really a symptom of the loss of social commitment" (Cherniss, 1986:219). A distinction is made between "commitment" as it is usually defined in the burnout literature and the concept of "social commitment".

Freudenberger & Richelson (1980:20) use commitment in this conventional context as a personality trait. People prone to burnout are the "overcommitted" who are "dynamic, charismatic, goal-oriented determined idealists" who want everything to be perfect.

Social commitment from the moral-religious perspective is defined as:

...I mean belief in a transcendent body of ideas and strong identification with a group, institution, or method that is based on those ideas. In other words, socially committed people believe in something greater
than themselves; and when work is based on this commitment, they are less likely to experience the phenomena associated with burnout (Cherniss, 1986, p. 219).

Cherniss (1986) gives two examples of settings where high levels of social commitment is associated with low burnout symptomatology. One was a residential institution for the mentally retarded run by an order of nuns. The sisters worked 7 days a week, 52 weeks a year in continual contact with residents while abiding by a plethora of onerous, trivial, and functionally unnecessary rules imposed by the church. There was no division of labor within this setting and all menial and demanding tasks were shared without regard to training or education. Despite their working under what would be clearly unacceptable working conditions by the standards of most professional social service care givers, these sisters not only did not show signs of burnout symptomatology but actually displayed joy in their work.

As well, Cherniss provides a secular example. A school for mentally retarded and emotionally disturbed children excluded from regular school as too difficult to teach operated in the slums of Chicago with a staff turnover rate of about 10%. This compared with staff turnover rates near 50% in other schools serving a similar population. The factors which seemed to set this school apart were positive charismatic leadership from the director and a staff
universally trained and certified in the Montessori teaching method.

Based upon these observations Cherniss proposes five sources of social commitment that might be incorporated in human service programs:

**Ideology**—To know that the Catholic church or Montessori sanctions a particular action reduces much of the ambiguity and self-doubt that can lead to lowered motivation and morale. Thus a strong, clear, explicit ideology seems to be one way in which institutions such as human service programs can build strong social commitment (Cherniss, 1986:222-223).

**Guidance**—refers to a specific program of behavioral norms, linked to the guiding ideology. The Montessori "method" provides a good example of guidance in a human service context. The method is based upon a clear set of values and principles that are translated into an elaborate, standardized curriculum...the Montessori method exists in a social context that infuses the curriculum with meaning and makes it a powerful vehicle for enhancing social commitment (Cherniss, 1986:223).

**Communion**—refers to practices that bring "members into meaningful contact with the collective whole". Another practice used in the Montessori school was regularized group contact: each morning before school the teachers would assemble for coffee and conversation, group
exercise, or some other kind of shared activity

(Cherniss, 1986:223)

**Investment**—"A process whereby the individual gains a stake in the group, commits current and future profits to it, so that he must continue to participate if he is going to realize those profits". The Montessori school used this mechanism in requiring all staff to return to school and invest a considerable amount of time and effort toward securing Montessori training and certification (Cherniss, 1986:224).

**Mortification**—involves the "submission of private states to social control, the exchanging of a former identity for one defined and formulated by the community". The formal probationary period for novices used in the religious order would be a specific example of mortification (Cherniss, 1986:224).

Cherniss argues that science has replaced religion with a new system of authority. The new "Age of Psychology" is essentially anti-religious and anti-authority. The scientific-technical paradigm fosters a mode of thinking which actually increases burnout by weakening "our ability to form strong commitment to any external frame of reference by encouraging a cool, critical attitude toward the world...and developing a culture of professionalism that weakens the bonds between caregivers and the settings in which they work" (Cherniss, 1986:225).
Another way the scientific-technical paradigm contributes to burnout is through its "strong emphasis on individualism and the insistence that the practitioner be granted a high degree of autonomy. This has the effect of isolating the professional from others; social support among members of a setting is weakened and thus everyone is more likely to experience stress and burnout (Cherniss, 1986:226).

Cherniss closes his discussion by acknowledging that whatever benefits professionalism may have provided, it nonetheless has drawbacks for both clients and professionals. He states:

Conversely, human service workers who receive a typical professional education, based on the scientific-technical paradigm, working in settings with weak ideologies, little guidance, minimal investment and mortification, and so forth should be particularly vulnerable to excessive demands and frustrations (Cherniss, 1986:227-228).

Cherniss urges the study of methods for introducing social commitment practices in human service programs.

Cherniss' view represents a significant step in coming to terms with the concept of burnout. The value of the paper lies not in any suggestion that the social work professions should return to pre-scientific thinking but in its illustration of the insights an alternative frame of reference can generate by "jarring our thinking". Cherniss does not catalogue of the odious baggage that was left
behind with the moral-religious paradigm although he had alluded to this in an earlier article (Cherniss & Krantz, 1983). These negative aspects would include the excesses of moral self-righteousness and the application of blame and guilt as change mechanisms. It is the release from guilt that the understandable concept of "burnout" provided to self-critical workers with no acceptable explanation for their "irrational" and "bad" feelings that accounted for the immediate acceptance of the term.

Some of the aspects important in the concept of burnout that Cherniss has helped tease out are: the importance of "meaning" or meaningfulness in one's work; the role of strong charismatic leadership; the ability of a shared ideology to introduce clarity into the work task; the importance of communion or peer support and sharing; the idea of "healthy investment" as opposed to "overcommitment"; the role mortification or similarly, ritual and "rites of passage" may play; and the concept of social commitment.

C. Marxist Perspectives

Marxists tend to view burnout as a consequence of the inherent contradictions in the structure of larger society. In effect, burnout is considered a symptom of a larger social problem, capitalism. David Woodsworth articulates this view:

Burnout, I would argue, results from the imposition of bureaucratic impersonal rules on professional practice
in the interest of maintaining control of the population while society makes the necessary adaptations through crises of capitalism (Woodsworth, 1983:32).

Although he does not identify himself as a Marxist scholar, the view McIntyre (1987) puts forward is consistent with this perspective. He argues that social workers burn out because they strive to be "significant change agents" in a world with a built-in and pervasive resistance to change. The sources of social worker "insignificance" are the bureaucratic organization of employing agencies, the self-serving goal of most professional associations, the co-opting influences of higher education, social attitudes favoring the status-quo, and the lack of cooperation of clients in promoting change due to their implicit awareness of the "social control" function of social workers.

Karger (1981) develops the Marxist view and argues that political perspectives influence the framing of research questions. Researchers operating from a scientific-technical paradigm do so within the logic of liberal and conservative ideology. Their conservative ideological roots condemn them to a narrow view of burnout as a professional problem rather than a "social phenomenon with its roots in the social view of the activity of production" (Karger, 1981:272). Karger criticizes the inability of the current literature to analyze the causes of burnout, predict its frequency or intensity, or adequately explain and categorize
the problem. He states: "the view of burnout as a phenomenon rather than as a predictable outgrowth of an alienating work environment results in the absence of a theory of burnout" (Karger, 1981:274). Karger notes the similarity between the Marxist concept of alienation and the concept of "professional burnout":

In Marxian terms, burnout is the objectification of the social worker's means of production; his skills of human interaction become a market commodity. The transformation of those skills into merely a means of production results in the distancing of a social worker from the client. This in turn results in the reification of the client relationship into an inanimate commodity. It is this reification, which alienates the worker from the authentic expression of his skills, that fits within the reported symptoms of burnout (Karger, 1981:275).

Norman Goroff (1986) takes a fresh and amusing approach to burnout and presents the "Love Paradigm" as an antidote. His position is not solely Marxist, he seems to operate from a broadly eclectic perspective but also uses Marxist terminology. Goroff argues that workers must develop informal organizations within the confines of repressive capitalist formal organizations that are based on a different set of assumptions.

An informal organization based on the Love paradigm can contribute much to the people involved to counter-act
the negative aspects of the hierarchical structured organization. Relationships based on caring and respect provides an essential nurturing that all humans need (Goroff, 1986:198).

Goroff's (1986) view stresses the importance of peer support and close and supportive relationships with those one shares a task as a primary factor in reducing the incidence of burnout symptoms.

D. An Existential Perspective

It seems logical, that if Cherniss (1986) can broaden our understanding of the communal aspects of burnout by applying an unconventional paradigm, that it might be some profitable to examine elements of existential philosophy to gain a better understanding the subjective quality of burnout.

Existentialism is a 19th and 20th century branch of philosophy and ethical thought which emphasizes the subjective or experiential nature of human reality. Different philosophers have developed existentialism in a variety of directions and American humanistic psychologists such as Rollo May, Erich Fromm, Eric Erickson, and Abraham Maslow have utilized some of its concepts. The existentialist perspective utilized in this study is derived from the North American schools which emphasize the positive, growth oriented aspects over the European schools emphasizing the negative. It is important to bear in mind
that existentialism is not a unified school of thought and, true to its "subjective" underpinnings, it is different things to different scholars. This section will draw selectively on the literature to highlight the ontological and epistemological dilemmas (e.g. is reality external to the individual or consciously created and is knowledge hard, tangible, and transmittable or soft, subjective, and transcendental?) inherent in the study of burnout.

Maslow (1968:9) acknowledges that much of existentialist thought "is too vague and too difficult to understand from a scientific point of view (not confirmable or disconfirmable)." However the value it has for this exercise (understanding the subjective nature of burnout) stems from:

.. it lays great stress on starting from experiential knowledge rather than from systems of concepts or abstract categories or a prioris. Existentialism rests on phenomenology, i.e., it uses personal, subjective experience as the foundation upon which abstract knowledge is built (Maslow, 1968:9).

Maslow (1968) systematically lists the benefits that can be derived from existentialist thought. The key concepts for this discussion are the emphasis upon the subjective, the concept of "responsibility" and the stress placed upon "the ultimate aloneness of the individual". About this third concept, Maslow states:
The existentialist stress on the ultimate aloneness of the individual is a useful reminder for us, not only to work out further the concepts of decision, or responsibility, of choice, of self-creation, of autonomy, of identity itself. It also makes more problematic and more fascinating the mystery of communication between alone-nesses via, e.g., intuition and empathy, love and altruism, identification with others, and homonomy in general. We take these for granted. It would be better if we regarded them as miracles to be explained (Maslow, 1968:14).

Apart from any preferences one may have for scientific over subjective-experiential "ways of knowing", neither of itself can fully account for the whole of social reality. Harbert (1982:7), an existentialist philosopher, notes that "For the contextualist, the whole is not the sum of its parts". "Scientific theories...do not give us the full truth about persons in the world but only abstractions thereof" (Harbert, 1982:8).

French, Rodgers & Cobb (1974), a group of analytic scientists, state:

There are two meanings for environment. **Objective environment** that exists independently of the person's perception of it and **subjective environment** as it is perceived and reported by the person (French, Rogers & Cobb, 1974:316).
The importance of the subjective is well established in the burnout literature. There is simply no reliable connection between the work and workers "burning out". As Karger (1981) points out, burnout is inconclusive in its predictability and assumptions and is more a description of symptoms than an integrated theory of human behavior.

It is the "subjective environment" which is as significant as the objective environment in determining burnout. Hence it is the "meaning" a worker attaches to his work which is important.

Frankl (1965), the originator of logotherapy, a form of existential psychotherapy, argues that the preeminent human drive is a will-to-meaning: the desire to give meaning to one's life. This contrasts with psychology which is based upon "status drive" or the will-to-power and psychoanalysis, based upon "the pleasure principal" or the will-to-pleasure. With regard to the meaning of work, Frankl notes "consciousness of responsibility arises above all out of awareness of a concrete personal task, a "mission" (Frankl, 1965:117)."

McIntyre (1987:1) touches upon the importance of meaning in his discussion of how workers "sell out, burn out, or opt out" due to powerful social forces which condemn them to "insignificance and irrelevance". Social workers desires to be meaningful and significant change agents are frustrated leading to burnout.
The concept of responsibility and the overriding relevance of the subjective or "consciousness" are interwoven. Consciousness contains the word "conscience" which implies responsibility (Frankl, 1968). Likewise, the word responsibility breaks down into the phrase "ability to respond". Thus, the existential concept of responsibility combines the notions of consciousness and responsiveness.

In an existential context, persons are responsible to one another rather than for one another.

Assuming responsibility for others is dehumanizing in that it turns the "other" into an object, a "thing" whereby one can demonstrate personal skill if the "thing" performs as one wills or conversely a personal incapacity will be highlighted if there is a failure to perform (Goroff, 1986:200).

The relevance of the existential concept of responsibility to burnout is clear. To lose sight of the distinction between being responsible to clients and becoming responsible for them is analogous to Freudenberger's (1980) state of overcommitment. Staying within responsibility boundaries is not the complete answer to burnout prevention but workers clear on the degree of responsibility they own for clients are certainly less vulnerable.

The compatibility with Maslach's (1982) progressive aspects of the burnout syndrome is provocative. A worker shoulders the load of responsibility rightfully belonging to
the client producing a state of Emotional Exhaustion; the dehumanizing objectification of the client by assuming their responsibility for self leads to Depersonalization; and by assuming the clients responsibility for personal successes and failures, the workers sense of Personal Accomplishment becomes dependent upon the client which, more often than not, leads to failure and a reduced sense of accomplishment.

The concept of the "ultimate aloneness of human existence" is analogous to the systems concept of "boundaries". The breakdown of boundaries in parent-child relationships describes a parent becoming "overinvolved" and assuming too much responsibility for the child. This is similar to the "overcommitted" worker who assumes too much responsibility for childlike clients. The client is encouraged to remain childlike and the worker burns out.

Krill (1978) has applied existential theory to social work and describes a type of worker he terms the "impulsive helper".

The "impulsive helper" is rooted primarily in feelings. This commitment through feelings is primarily narcissistic, for his helping behavior supports, shores up, reassures his own self-worth and sense of adequacy. He uses others (even under the guise of helping them) as a means to prove his own adequacy. He does not know how to listen to life outside himself (Krill, 1978:8).
He presents a range of "social worker types" and his ideal, "the solitary" is based upon an existential awareness of "ultimate aloneness".

As the helping professional becomes disengaged from his personal anxieties, self-pity preoccupations, and hidden as well as outspoken resentments, he arrives at an inner void that permits a more responsive and creative engagement with the complex tasks that confront him in practice. Paradoxical as it may seem, the application of the existential stance to our understanding of practice in the helping professions provides for a flexibility, a detachment, an objectivity sorely needed today. The philosophy that had its birth in impersonal alienation results in an active, relational engagement with the problems of life (Krill, 1978, preface xv).

An existentialist perspective uncovers aspects of burnout not apparent from other perspectives. Frankl's (1965) idea that for work to have meaning a worker must have an awareness of "a mission" comes very close to a combination of the concepts of "ideology", "guidance" and "investment" that Cherniss (1986) develops from the moral-religious paradigm.

Existentialism highlights the critical role played by subjective "consciousness" in all aspects of human phenomena. Social reality is always an interaction between
subjective and objective reality. Any theory of burnout must attempt to get at both these aspects of the phenomenon.

E. Burnout Research

The most significant research conducted in the 70's was a massive three year study by Berkley Planning Associates (1977). This seminal three-year exploratory-descriptive study sought to gain a general understanding of the relationship between burnout and worker characteristics, management structures, and features of the organizational structure. The aims of the study were to: define organizational and management aspects of the projects under study; establish prevalence of worker burnout among staff; and determine the relationships between these factors.

The study was organized around a general hypothesis, that burnout is directly associated with personnel characteristics and management processes and indirectly related to organizational factors (Berkley Planning Associates, 1977:14).

The study addressed several principal questions:
1- How prevalent is burnout in child welfare workers?
2- Is burnout the same as lack of job satisfaction?
3- To what extent is burnout related to worker characteristics?
4- To what extent is burnout related to management processes?
5-To what extent is burnout related to organizational factors? (Berkley Planning Associates, 1977:13)

Data was collected at seven sites spread over the U.S. and included 162 subjects. Both quantitative and qualitative methodologies were employed using interviews and questionnaires. As well data was collected from subjects who had left the agencies prior and during the study. Data collection was done during three day visits to the sites where administrators were interviewed and agency records reviewed to obtain data on management practices and organizational structures. Data collection and design was thorough and comprehensive (Berkley Planning Associates, 1977:15).

The study produced a number of interesting findings. Worker characteristics which emerged with significant but not strong relationships to burnout were: younger in age, less experienced, male (small percentage of sample), full time workers, and workers supervised by others. Management processes which were closely associated with burnout were: quality of leadership, task orientation, clarity, control, and innovation. The organizational properties with significant relationships to burnout were: high caseload, formalized rule observation, project staff turnover rate, and centralized program decision making. Projects with high turnover rates tended to have the lowest burnout rates suggesting their burntout staff tended to leave. The relationship between burnout and turnover was complex and
enigmatic. Many of the conditions associated with high levels of burnout (caseload size, formalization & centralization) did not lead to turnover. The implication was that some of the most bureaucratic settings, which tend to facilitate burnout, also tend to retain burned out workers (Berkley Planning Associates, 1977:27-41).

Perhaps the most important finding of this study is the importance of leadership as a factor in burnout. "In work environments where leadership provided structure and support, only 27% of workers were burned out. In all situations where leadership was low or inadequate, workers were either burned out or moderately burned out" (Berkley Planning Associates, 1977:42). The critical importance of the supervisory/leadership role for workers in jobs with high potential for burnout was highlighted by the finding that "supervised by others" was significantly correlated with burnout.

Berkley Planning Associates (1977) were the first to extensively relate burnout measured by self-report questionnaires and interviews with characteristics of the work environment as measured by an adapted version of the Moos (1974) Social Climate Scales.

Moos (1981, 1986) later revised his Social Climate Scales into a version adapted specially for work environments, the Work Environment Scale (WES). This scale contains ten dimensions, Involvement, Peer Cohesion, Supervisor Support, Autonomy, Task Orientation, Work
Pressure, Clarity, Control, Innovation, Physical Comfort, and has been used extensively to measure the environment in burnout and occupational stress research (Koran, et. al., 1983; Parkes, 1982; Weinberg et al., 1983).

Several authors have developed instruments to measure burnout (Maslach & Jackson, 1981; Meier, 1984; Pines & Aronson, 1981) but the instrument which has been used most is the Maslach Burnout Inventory (Maslach & Jackson, 1981). The MBI measures the frequency of three different dimensions of burnout, Emotional Exhaustion, Depersonalization, and Personal Accomplishment.

Golembiewski & Munzenrider (1981, 1983, 1984a, 1984b) and Golembiewski et al., (1983) have done extensive work testing the interrelationships of the three MBI subscales and examining the possibility (suggested by Freudenberger, 1974) that burnout might have "active" and "passive" behavioral symptoms. They have found that the Emotional Exhaustion subscale of the MBI is the most salient indicator of burnout.

A number authors have used both the MBI and WES in their research. Rosenthal et al. (1983) conducted an exploratory cross-sectional survey of a large random sample (n = 414) of parks employees in Iowa and Missouri and used a canonical analysis to examine the interrelationship between burnout (dependent variables) and work environment (independent variables). They found that the Emotional Exhaustion (EE) subscale of the MBI was strongly correlated
with the WES dimensions of Supervisor Support, Work Pressure, and Clarity.

Hunnicutt & MacMillan (1983) and MacMillan & Hunnicutt (1983) reported on a three year experimental study using the MBI and seven of the ten WES subscales (Physical Comfort, Innovation, and Peer Cohesion were omitted). The WES measures were included to estimate any changes in the work environment over the three years of the study.

A sample of mental health agencies were divided into a control group (CG, 5 agencies, n = 90); an experimental group (EG1, 6 agencies, n = 70) which received staff development workshops based on the research of Maslach (1978a, 1982b); and an experimental group (EG2, 5 agencies, n = 91) which received both the staff development workshops and a structured opportunity for involvement in program development with an organizational development consultant.

Their studies (Hunnicutt & MacMillan, 1983; MacMillan & Hunnicutt, 1983) produced several important findings. First, the Emotional Exhaustion subscale of the MBI was found to be the most potent indicator of burnout. Second, a much stronger relationship between the WES and burnout was found in the third year than was expected. Levels of perceived Supervisor Support and Autonomy decreased significantly in the control groups while Clarity and Task Orientation improved significantly in the program development groups (EG2). Third, members of the control groups showed significantly higher scores on the MBI Emotional Exhaustion
and Depersonalization subscales after three years. The workshops only (EG1) improved slightly but not significantly in levels of burnout while staff in the program development groups (EG2) showed a significant decrease in Emotional Exhaustion.

Unfortunately the studies do not indicate whether the same individuals were tested over the three year period. These work environments usually have high rates of staff turnover so it is not clear how to interpret the findings. Weinberg et al. (1983) found that levels of burnout varied widely between different settings and was highly correlated with staff turnover, especially turnover at management and supervisory levels. Any turnover in the sample groups over the three year period could have outweighed the influence of the interventions.

Hunnicutt & MacMillan, (1983:9) state: "The findings support the contention that patterns of management and decision-making provide a powerful mediating influence upon the strains of the daily routine which can lead to staff burnout." Thus the authors suggest that it is possible to prevent burnout but not with workshops aimed at individuals as the focus of intervention.

Savicki & Cooley (1987) examined the relationship between burnout and environmental factors using a design that permitted a comparison of the relative importance of several environmental factors. As well, they examined the
role of moderator variables in the burnout-environmental correlations. These were defined as:

Moderator variables are those that influence the relationship between two other variables. For example, if there were a significant correlation between years of employment and salary for male employees but not for female employees, then sex would be a moderator variable for the relationship between years of employment and salary (Savicki & Cooley, 1987:249).

Operational definitions of burnout and environment were provided by Maslach & Jackson's (1981) Maslach Burnout Inventory and Moos' (1986) Work Environment Scale. Savicki & Cooley (1987) used "amount of direct client contact" as their moderator variable.

The study sample consisted of 94 mental health workers from 10 agencies in Oregon. These included two residential treatment centers for emotionally disturbed children and youth, a residential treatment center for delinquents, two day programs for disturbed youth, four community mental health centers, and a court counselling staff. Job titles ranged from: child-youth care workers (29), mental health specialist (24), supervisor-administrator (17), family worker (6), psychologist (5), nurse (2), psychiatrist (2), and para-professional (5). Ages ranged from 19 to 57 (mean = 33.5) and 55% of the sample were women. Levels of burnout were comparable with the normative sample for the MBI (Maslach & Jackson,, 1981).
Savicki & Cooley used the frequency scores of the MBI and computed a "summary" MBI score from the three subscales (Emotional Exhaustion, Depersonalization, & Personal Accomplishment). Correlations were run between these four MBI scores and the ten WES subscale scores.

The majority of these MBI and WES correlations were significant (28 of 40, p < .05), with the summary score of the MBI (total frequency) correlating significantly with 8 of the 10 WES scales (Involvement, r = -.37; Peer Cohesion, r = -.38; Staff Support, r = -.32; Autonomy, r = -.31; Task Orientation, r = -.28; Clarity, r = -.32; Control, r = .30; Innovation, r = -.25; all ps < .01 (Savicki & Cooley, 1987:250).

These findings must be viewed with caution. Maslach & Jackson (1981) warn that MBI subscale scores measure different affective states and should not be combined.

In a second analysis, the overlap between WES scale scores was controlled by using a stepwise multiple regression. High work pressure, low involvement, and low autonomy related to high levels of emotional exhaustion. Peer cohesion and physical comfort related to personal accomplishment and finally, high control and lower task orientation related to depersonalization. Lower Peer Cohesion had the strongest relationship with the summary MBI score while Task Orientation and Control were also related (at levels of p < .05).
The moderator variable, percentage of client contact, was examined by dividing the sample into high and low contact groups. The cutoff point was 50% of time spent in direct contact with clients. High contact workers (n = 53) and low contact workers (n = 24) did not differ on sex. Low contact workers were overrepresented in administrative and supervisory positions and were older (mean age = 36.1 vs 32.1) than high contact workers. Comparing these subsamples using a discriminant analysis of the WES scales showed high contact workers reporting higher control, higher autonomy, and lower innovation than low contact workers. High contact workers also reported higher levels of Depersonalization (Savicki & Cooley, 1987:250).

Multiple regressions were run for high and low contact groups to identify WES contributors to the MBI frequency scales. Low contact workers (n = 24) had no WES dimensions correlating with Personal Accomplishment but Emotional Exhaustion was correlated with Work Pressure, Physical Comfort (p < .001) and Innovation (p < .05).

High contact workers (n = 54) had only one relationship significant at p < .001, Peer Cohesion with Personal Accomplishment. Relationships significant at p < .05 were: Supervisor Support, Task Orientation, and Work Pressure with Emotional Exhaustion; Task Orientation with Depersonalization; and Peer Cohesion and Task Orientation with the summary MBI (total frequency).
Their study confirms the importance of worker commitment, co-worker relationships, and supportive supervision for inhibiting burnout. The findings are consistent with results produced by others (Barad, 1979; Berkley Planning Associates, 1977; Pines & Kafry, 1978) using other instruments. As well, Savicki & Cooley (1987) reproduce previous findings demonstrating the role of inflexible restriction of worker freedom, lack of worker input in planning and control over the work, vague job expectations, management control via rigidly imposed rules and regulations, and inhibition of worker innovation as working environmental conditions fostering burnout (Berkley Planning Associates, 1977; Hunnicutt & MacMillan, 1983; Maslach, 1982; Maslach & Pines, 1977; Pines & Maslach, 1978).

Savicki & Cooley (1987:251) conclude that Emotional Exhaustion is mostly related to the source of "push" or drive to complete work. "If the push comes from external pressures to work, workers will be more likely to report their emotional resources are depleted." This is analogous to the concept of external versus internal locus of control in the therapeutic relationship discussed by the authors in a prior article (Savicki & Cooley, 1983).

Other plausible conclusions by Savicki & Cooley (1987:251) are: Personal Accomplishment is related to peer support because co-workers function as a reference group by which workers judge their competence; higher
Depersonalization stems from arbitrary imposition of rules and pressure on workers by management; lower Depersonalization is associated with work environments where workers plan and have some control over their work; and that "The relationships between burnout and environmental characteristics explored here are obviously complex."

F. Conclusion

The factors which are repeatedly identified as closely correlated with burnout are:

1. Attributes of individual workers. These include objective attributes such as the workers age, level of experience and training, sex, and marital status. These factors alone fail to account for why similar workers in identical jobs can vary so drastically in their vulnerability to burnout. Consequently, there must be a subjective component to burnout which includes such intangibles as a worker's outlook on life, the meaning a worker attaches to their work, and the way events associated with work are interpreted and experienced unique to the individual worker. This "subjective" quality of burnout has not been studied at all.

2. Attributes of the immediate, interactive, "social" working environment. The relationship between the perceived social environment and burnout has been examined in a few studies (Berkley Planning Associates, 1977; Parkes, 1982; Rosenthal et al., 1983; Weinberg et al., 1983) and a
number of regularities have been observed. Clarity in the work task and the quality of leadership and supervision are gross factors which tend to correlate with burnout but they are also obvious components of good administration and as such do not provide much specific guidance to supervisors wanting to intervene to prevent burnout.

The research correlating work environment with burnout has not attempted to examine specific work environments. Findings such as the importance of clarity of task and quality of leadership have been identified by examining large samples or workers. One problem with this is that numerous workers perceptions of many different social micro-environments have been lumped together losing any information on specific experiential environments. Research to benefit practitioners in the field will get at the specifics of the micro working environments that supervisors and administrators actually work with.

Just as most research on individual burnout attributes has failed to get at the subjectivity of the phenomenon, most of the work examining the environment has been biased toward the more objective, macro attributes of the environment. The importance of Cherniss' (1986) presentation of the "moral-religious paradigm" is that it highlights the need for a better understanding of the less tangible, experiential elements of a workers immediate social environment.
3. **Attributes of the macro-environment.** This level of environmental influence on burnout is discussed by the Marxists. This is an important area in which little concrete research has been done. Though beyond the scope of this study, it would be valuable to examine burnout using a cross-cultural methodology designed to isolate macro-environmental variables. For the purposes of the present study it is assumed that all the workers sampled are exposed to roughly the same objective macro-environmental influences.

Consequently, this study will attempt to add to the present level of understanding of burnout by exploring practical ways to identify problematic attributes of micro working environments which are correlated with burnout in the workers in that specific work site. The goal then is to gain a fuller understanding, not of what gross environmental characteristics are generally associated with burnout, but how useful specific work environment information can be obtained with which to guide efforts at preventing burnout.

As well, this research will be tempered with an approach which tries to take into account the highly individual and subjective nature of the burnout phenomenon.
Chapter III - Research Problem

A. Conceptual Framework

Before discussing specific models of burnout, it is useful to review some global assumptions on human functioning that are implicit in any model. Marks (1977:926) argues that burnout is a subjective phenomenon of human beings and the simple organic analogies implicit in the concept cloud this fact. A fixed energy or scarcity model of human energy fails to explain the fact that human resources are flexible and can expand and contract depending upon many factors.

Maher (1983) notes that much of the burnout literature tends to be descriptive and focuses on causes and cures. She builds upon Marks'(1977) arguments and suggests that there are two competing antithetical theoretical approaches to explaining human energy. The scarcity model largely derives from the work of Freud who saw humans with a limited supply of libidinal energy to be distributed through the body and psyche. Its antithesis is the "expansion approach", best exemplified by the work of Durkheim (Maher, 1983:392). Marks (1977:926) prefers the Durkheimian view: "Some roles may be performed without any net energy loss at all; they may even create energy for use in that role or in other role performances". This view allows an explanation for the very real human ability to "rise to exceptional
challenge" and the fact that certain levels and types of stress act to optimize human performance. That the scarcity model and the expansion model both accurately describe fragments of human functioning despite being opposites illustrates one limitation of applying organic analogies to describe human functioning.

A number of authors have proposed models of burnout (Carroll & White, 1982; Harrison, 1983; Kamis, 1982; Perlman & Hartman, 1982) but few have been tested empirically.

Carroll & White's (1982) model is complex and derived from systems theory. While the model is broad enough to encompass both environmental and individual burnout factors, it does not readily lend itself to simplification and prescriptive categorization of interventions. Like many models based on systems theory, it tends to be vague and difficult to operationalize. Carroll & White's (1982:46) model is premised on 19 assumptions (eg. "burnout is caused by prolonged exposure to stress and frustration; is not a disease or medical condition; and may lead to professional growth and development.") and contains the key components of: (1) the person; (2) the environmental components: the microsystem, the mesosystem, the exosystem, and the macrosystem.

The microsystem is the smallest unit of organized work (eg., the office or department; the mesosystem the larger complex of smaller work units that comprise the company or institution/agency; the exosystem the non-
work eco-systems which impact on the worker (e.g.,
surrounding community); and the macrosystem the larger
cultural and world-wide complex (Carroll & White,

Each of these components are amorphously "surrounded by
the next larger system and assumed to be: "complex, dynamic,
and unique." All elements interact to varying degrees. the
consequence of all these interactions are experienced
throughout the entire system and are reciprocal in nature
(Carroll & White, 1982:47)."

The concept of the microsystem or the immediate social
work group is a useful concept with a strong bearing on
burnout. Cherniss (1986), in presenting the moral-religious
paradigm, has highlighted the importance of a workers
immediate, interactive, communal social work-group to
burnout. The concepts of exosystem, mesosystem, and macro
system, while obvious and valid from a systems perspective,
are of little use in this research. The relationships
between these "levels of systemic organization" are too
vague and variable to be of much practical value.

Harrison's(1983) social competence model is simpler and
based on behavioral principles. A workers motivation to
help is either enhanced or reduced depending on whether
barriers or helping factors are experienced in the work.
Helping factors lead to high effectiveness, a sense of
competence and enhanced motivation to help. Barriers lead
to low effectiveness and burnout and hence, to reduced
motivation to help. Harrison's (1983) model may describe psychodynamic processes of burnout but offers little promise for explaining environmental factors which are simplified into either "barriers" or "helping factors".

Perlman & Hartman (1982:296) proposed a broad model which included all the significant burnout variables studied at that time. The model has three dimensions reflecting the three major symptom categories of stress: (a) physiological, focusing on physical symptoms (physical exhaustion), (b) affective-cognitive, focusing on attitudes and feelings (emotional exhaustion, overdepersonalization), (c) behavioral, focusing on symptomatic behaviors (overdepersonalization, lowered job productivity) (Perlman & Hartman, 1982:296).

Perlman & Hartman's (1982) model contains four stages: (1) the degree to which a situation is conducive to stress; (2) the level of perceived stress; (3) physiological, affective/cognitive, and behavioral responses to stress; and (4) the outcome of the stress (e.g., job performance and satisfaction levels, burnout, turnover, dismissal).

The first stage, the degree to which a situation is conducive to stress, is mostly the result of the objective attributes of the work environment and the individual worker moderated by individual coping abilities. The second stage involves "perceived stress" and is the authors attempt to deal with the variability and subjectivity of burnout. Perlman & Hartman (1982:258) acknowledge that little work
exists which reviews the transition between stages one and two. Stage three is the response to stress (whatever its source, real or perceived) and stage four is the outcome of stress, burnout.

Perlman & Hartman's (1982) model represents a significant step forward in burnout model construction as it manages to incorporate all the major burnout variables isolated by research and also attacks the issue of subjectivity. The model's major weakness is in its assumptions about the sequential nature of burnout. There is no evidence that a person must go through the four stages postulated by the authors to reach a state of burnout. As well, the only explanation for a worker not reaching a state of burnout in a high stress job is reduced to "individual characteristics" and "work and social environments" which fails to capture the richness that results from analyzing these "influences" from Cherniss' (1986) moral-religious paradigm and an existential perspective.

Kamis (1982) devised a model of burnout by transposing an epidemiological model from clinical mental health research. The model groups events and variables into three domains which represent predisposing, precipitating, and perpetuating factors. Predisposing factors are either determined (e.g., type of client or physical structure of the workplace) or changeable (e.g., bad office policies or lack of training). Precipitating factors are developmental (e.g., reaching a career summit) or situational (e.g.,
budget cuts or layoffs). Perpetuating factors are variables which intervene or act upon predisposing and precipitating factors to discourage burnout. Perpetuating factors are both personal skills—strengths and environmental supports.

Kamins' (1982) and Perlman & Hartman's (1982) models are similar and promising. Both are somewhat unwieldly but they manage to incorporate most of the variables research has determined as important in burnout. Perlman & Hartman's (1982) model allows for the subjective quality of burnout with the concept of "perceived stress". Both authors at least superficially consider the importance of personal and environmental or organizational factors.

Perlman & Hartman (1982:296) argue that models should "provide a basis for variables to study as researchers attempt to predict who will burn out." They ask the questions: What types of models best structure burnout research? How detailed or broad are the most useful models?"

The answer is the simplest model which includes the most detail. A simpler reorganization of Kamins' (1982) and Perlman & Hartman's (1982) models results from constructing a two-dimensional framework which analyzes burnout along the continuums of: subjective vs objective and individual vs environmental. The four quadrants produced are the objective-individual; the subjective-individual; the subjective-environmental; and the objective-environmental dimensions. (see figure 1).
FIGURE 1
A Two Dimensional Framework for Viewing Burnout

<table>
<thead>
<tr>
<th>SUBJECTIVE</th>
<th>OBJECTIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Existential</strong></td>
<td><strong>Scientific-Technical</strong></td>
</tr>
<tr>
<td>self-perception/awareness</td>
<td>personality traits</td>
</tr>
<tr>
<td>personal ideology</td>
<td>personal characteristics</td>
</tr>
<tr>
<td>philosophy of life</td>
<td>lifestyle</td>
</tr>
<tr>
<td>spiritual identity</td>
<td>behavior</td>
</tr>
<tr>
<td>experiential knowledge</td>
<td>role factors</td>
</tr>
<tr>
<td>consciousness</td>
<td>[role over load]</td>
</tr>
<tr>
<td>I</td>
<td>N</td>
</tr>
<tr>
<td>INDIVIDUAL</td>
<td>ENVIRONMENTAL</td>
</tr>
<tr>
<td>environmental perception/awareness</td>
<td>workplace structure</td>
</tr>
<tr>
<td>communal methodology/ideology</td>
<td>-authority</td>
</tr>
<tr>
<td>spiritual community</td>
<td>-workload</td>
</tr>
<tr>
<td>Moral-Religious</td>
<td>-bureaucracy</td>
</tr>
<tr>
<td></td>
<td>relations of production</td>
</tr>
<tr>
<td></td>
<td>socio-economic structure</td>
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<tr>
<td></td>
<td>macro</td>
</tr>
<tr>
<td></td>
<td>Marxist</td>
</tr>
</tbody>
</table>
Objective-Individual

The objective-individual quadrant is described by Cherniss (1986) as the view developed from the scientific-technical paradigm and includes Perlman & Hartman's (1982) non-subjective personal variables such as background characteristics and physical health. In Kamis' (1982) model this quadrant contains most of the personal skills half of the perpetrating variables: intelligence, problem solving coping ability, self efficacy, ego strength—the changeable predisposing variable of inappropriate training—and the precipitating developmental variable of early naivete.

In general this quadrant represents the relatively static observable or measurable characteristics of an individual such as demographics, personality traits, and cognitive abilities or disabilities.

Subjective-Individual

The subjective-individual dimension refers to the experiential "life-world" of an individual worker. It entails his or her spiritual identity, philosophy of life or personal ideology, level of self-actualization, and sense of personal boundaries or existential aloneness. There is no hard and fast demarcation between this dimension and the others; they merge into each other. Personal variables mentioned by Perlman & Hartman included in this quadrant are organizational/professional commitment, commitment to career, personal needs/dynamics, professional identity and
perhaps tolerance of ambiguity. Factors mentioned by Kamis (1982) belonging to this quadrant are self-actualization and clear and realistic values from the perpetuating skills category; a workers experience of all of the precipitating-development factors and the situational factor of death of a client; and the changeable predisposing factor of powerlessness (powerlessness may belong equally in the objective-environment quadrant).

Subjective-Environmental

Cherniss' (1986) proposal of a moral-religious paradigm as an alternate view of burnout describes the subjective-environmental aspects of burnout. This quadrant consists of the communal reality that may or may not be present for a worker. It describes both the cognitive and emotional involvement a worker has with others. This shared communal reality may be pegged to a methodology or some form of religious or political ideology. This reality may be shared with one other person, an immediate peer group, a professional association, or a nation. In some sense it is the implicitly agreed upon way of ordering experience that is the substance of the interactionist, phenomenological, and ethnomethodological schools of sociological thought.

Organizational variables from Perlman & Hartman's (1982) model included in this quadrant are work group norms, support from others, and colleagues's beliefs and values. Factors from Kamis' (1982) model are most of those listed as
perpetrating support variables—support systems, co-workers support, familial, social religious and organizational affiliation. Management support might be considered in this quadrant or the next.

**Objective-Environmental**

The objective-environmental quadrant contains all the structural and physical attributes of the work environment and includes the larger institutional structures of society discussed by the Marxist writers. Included are the structure of the work such as workload, frequency of meetings, pay and benefits, supervisor-staff ratios, other hierarchical and authority relationships, levels of bureaucratic organization, formalization of roles and relationships, relations of production, worker control over the work, and so on. At the more macro scale of the continuum are the influences on the worker of dominant social, economic, and political ideologies (this begins to overlap with the subjective-environmental). In the micro arena are relationships with family and social groups outside of work where this quadrant begins to fade into the others.

Variables from Kamis' (1982) model included in this quadrant are: many of the predisposing factors, both determined and changeable, such as mundane tasks, upward mobility thru administration, bad office policies, isolation, segregation, sexism & minority status inadequate
funds, and so forth; some of the situational precipitating factors such as changes in work climate, procedural changes, programic changes, layoffs, and budget cuts. Variables such as powerlessness and management support may be shared with the subjective-individual quadrant depending upon whether the "experience of" or the "reality of" these factors are in question.

Organizational variables from Perlman & Hartman's (1982) model included in this quadrant are: work load, expected performance, supervision, opportunity for advancement, pay, economic/market conditions, and organizational response to individual response.

This four dimensional framework provides a useful way of organizing important burnout variables with the ultimate goal of suggesting theory. The diversity within the very broad concept of burnout mitigates against the development of a single unified theory. Most micro-level theories proposed for burnout tend to describe burnout processes within one or two quadrants. For example, Harrison's (1983) social competence model reduces all environmental dimensions to "helping factors" or "barriers" and thus, is descriptive of processes within the individual half of the framework. Likewise, Carroll & White's (1982) ecological model describes burnout influences (variables) ranging from the individual to macrosystem (cultural). While describing both individual and environmental influences, the ecological
model fails to account for the subjective qualities of burnout.

This two dimensional model represents only an abstraction of the phenomenon of burnout. A fuller and more descriptive model is generated with the inclusion of the dimension of time. In effect, the individual-environmental dimension becomes the X axis, the subjective-objective the Y axis, and time the Z axis. (see figure 2).

Kamis' (1982) model makes no direct reference to time other than the implication that predisposing variables occur first, precipitating variables are events in the present or about to occur, and perpetrating variables are factors acting throughout. Outcomes are the behavioral consequences (burnout) of the preceding events but with no suggestion as to what comes after.
FIGURE 2.

A Three Dimensional View of Burnout Incorporating the Dimension of Time

X axis = Individual vs Environmental focus
Y axis = Subjective vs Objective quality
Z axis = Time dimension
Perlman & Hartman's (1982) model has four stages and is systemically based. Its advantages are that it allows for the dimension of time and an ongoing developmental view of burnout. The disadvantages are its complexity and the considerable number of assumptions which must be made as to where and when a variable is operative. Perlman & Hartman (1982) solve this problem by repeating variables at different stages but this just adds to the complexity of the model.

Including the dimension of time in burnout models raises interesting questions. Do people ever experience burnout more than once and if they do, is the experience the same the second time around? Common sense and experience would suggest that some people do experience burnout more than once in their lives and that it could never be experienced the same way twice. Consequently, burnout must be considered in a developmental context. To view burnout as a static objective condition is to reify the concept and deny the capacity of human beings to integrate personal experience, to grow and to develop. Therefore, the question arises: Could burnout be viewed as some negative extreme state of what is a natural developmental process?

Savicki & Cooley (1983) noted that the Maslach Burnout Inventory variable of Depersonalization is the polar opposite of "Over-Identification" with clients. The ideal for professional involvement with clients is a state of "detached concern" which is somewhere between over-
identification and a complete "loss of concern" with the welfare of the client. The authors suggest that these burnout variables exist on a continuum of "over-identified"—"detached concern"—"loss of concern". Over-identification is described as:

"loss of objectivity, personal involvement in outcome, blurring of distinctions between therapist and client"; depersonalization as "loss of empathy and caring, loss of objectivity, and no personal involvement in outcome"; and detached concern as "emotional detachment with no loss of objectivity and empathy" (Savicki & Cooley, 1983:232).

On this "identification with the client" continuum, either of the extremes represent "negative consequences in the helping relationship."

Savicki & Cooley (1983) also suggest that an analogous continuum, Therapeutic Locus of Control, describes the process by which "such individuals take upon themselves the onus of change." They "glory in success and agonize in failure." This continuum ranges from "Internal" (high level of perceived control over outcome, full responsibility for outcome, emotional involvement in outcome) to "Balanced" (realistic assessment of therapist's role in change process) to "External" (low level of perceived control, no responsibility for outcome, emotional detachment) (Savicki & Cooley, 1983:232). In effect, Saiciki & Cooley have
identified subjective variables similar to the concepts generated applying an existential perspective to burnout.

One implication of Savicki and Cooley's continuum is the prospect that burnout may be a dynamic, developmental process which, if managed in a positive growth inducing way, might result in an inexperienced worker maturing into an effective, balanced, helping professional able to work with "detached concern".

Figure 3 introduces the dimension of time to Savicki & Cooley's (1983) overidentified-depersonalized continuum to illustrate how the burnout process might occur for a new worker starting out over-committed, idealistic, altruistic, and with a strong personal need to help others in order to feel adequate as a worker. The vertical scale ranges from Over-identification at the top to the neutral state of Detached Concern in the middle to the burnt-out state of Depersonalization at the bottom. The horizontal axis represents time.
Figure 3
Hypothesized Sequence of Overidentified/Depersonalized Stages of Burnout Over Time

The graph pictured in figure 3 describes a worker starting out very highly over-identified with clients which leads sharply to a state of Depersonalization. The worker recovers, regains motivation, and returns to an overidentified state less intense than before due to experiential learning, maturity, or development. This process is repeated until the worker attains a healthy state of detached concern.
This is postulated as a typical situation with a positive outcome. Other scenarios are possible such as a worker progressing steadily to a state of detached concern without experiencing burnout or the worker whose swings up and down the continuum from over-identified to depersonalized with no lessening of intensity until leaving the field. The obvious limitation of this model is the implication that a worker passes through a positive state of detached concern on the way from over-identification to depersonalization.

Savicki & Cooley's (1983) continuum falls entirely within the individual side of the three dimensional model discussed previously. Levels of over-identification, detached concern, and depersonalization refer to subjective and objective states of the individual. However, is depersonalization the only outcome for an over-identified neophyte worker becoming burned out? Depersonalization implies an isolated, private experience of withdrawal from ones clients. Could a worker becoming burned out begin to act-out negative behavior instead turning inward?

Edelwich & Brodsky (1980) report the case of Roger F., an addiction counselor working in a situation where the norms of his work group condoned buying stolen goods from, and taking sexual advantage of addict-clients such that he eventually engaged in the same behavior. Certainly more than simple depersonalization is involved in this instance. A model which incorporates the subjective-environmental
influence of a workers communal work team is more useful in this case.

Minnehan & Paine (1982:100) assessed the economic and legal consequences of burnout and list employee theft and sabotage as a direct effect on employers. In this case the employee may or may not have withdrawn from clients but is acting out the condition of burnout in the workplace against the employer. In a similar vein, Goroff (1986) argues that agency requirements for record keeping are dehumanizing for clients and workers and a way of maintaining institutional control over both. This institutional requirement is an insidious source of disillusionment and disappointment (burnout) for workers who must choose between helping clients or keeping records.

All this suggests another continuum of idealism vs disillusionment where the outcome is an anti-social type of burnout which involves acting-out negative behaviors in the work place. The descriptive quadrant in the three-dimensional model is the objective-environmental. The burnout outcome in this instance is angry anti-social or anti-establishment behavior rather than the inward desperation of depersonalization.

This formulation of a three dimensional model of burnout in terms of individual-environmental, subjective-objective, and time is neither complete nor fully comprehensive. The model needs empirical testing before its value can be determined. As a framework or heuristic
device, the four quadrants created by the subjective-objective and individual-environmental axes seem able to encompass the majority of significant burnout variables isolated in prior research.

The relationship of burnout to the dimension of time is the least understood. Numerous authors (Einsiedel & Tully, 1982; Perlman & Hartman, 1982; Savicki & Cooley, 1983) have commented on the lack of longitudinal research into burnout. Important questions need to be answered. Is burnout cyclical? If workplaces tend to have a relatively stable percentage of highly burned out workers (Weinberg et al., 1983 found 15% to be the norm), then are the same individuals remaining chronically burnout out or is there turnover in this high burnout group? These and many other questions can only be answered with longitudinal research designs.

Although the present study relies on the four quadrant framework to guide the research, the limited time available ruled out a longitudinal design. Consequently, this study suffers from the same limitation of most burnout research; it is cross-sectional and adds little to the understanding of process of burnout over time.

B. Research Issues

The goal of this study is to explore the feasibility of using burnout and work environment measures together to diagnose and intervene to prevent burnout. The key question
is: What work environment variables are most significantly correlated with higher levels of burnout in staff? To provide useful information, specific correlations between burnout and a range of work environment variables must be generated. This information would allow supervisors and administrators to target intervention more effectively and economically.

Many studies (Berkley Planning Associates, 1977; Macmillan & Hunnicutt, 1983; Rosenthal, et al., 1983; Savicki & Cooley, 1987; Weinberg, et al., 1983) have demonstrated that burnout and the work environment are highly interactive and burnout has been identified as a valid concept with a strong relationship to depression (Meier, 1984).

Weinberg et al. (1983) noted the considerable variability in level of burnout between institutions and between occupational categories within institutions. A finding of this study is that levels of burnout are strongly associated with micro-environments. The authors state:

Consequently, this idiosyncratic nature (of burnout) significantly decreases the likelihood of finding variables which act as "common causes" of burnout. Since burnout and stress can result from different sources for different individuals, no one plan of attack will be successful even for the majority of organizations and individuals within those organizations. Instead, attempts to minimize or reduce
burnout and job stress must take into account the unique aspects of the individual staff member, the unique environment of the individual work setting, and the way in which these two interact to create or act as buffers against unnecessary and debilitating levels of job stress (Weinberg et al., 1983:252).

Large random samples are good for descriptive purposes such as showing which general characteristics of a work environment are correlated most highly with burnout. Most studies have relied on large samples and have not tried to focus on the characteristics of specific work sites.

Weinberg et al. (1983) and Rosenthal et al. (1983) measured burnout and the work environment in large samples (n = 724 and n = 414 respectively) with response rates of 84% for the first study and 70% for the second. What this means is that levels of burnout in respondents was compared with the averaged scores of individuals perceptions of numerous different micro-environments. The data analysis design lumps all these micro-environments into one losing any information on the unique features of each.

Supervisors intervene in work teams or micro-environments and need a tool useful for this purpose. Paine (1982:16) suggests that model builders must create two sets of models. "On one level are generic models of the BOP (burnout process) which casts it as a general response to work stressors. This needs to be supplemented by models
which delineate the factors operating within specific work settings."

For measures of burnout and work environment to provide useful information to guide intervention, they must be able to identify specific problematic attributes of the work environment and connect this information with workers and types and degrees of burnout.

Toward the goal of exploring the utility of using burnout and work environment measures together to enable more effective and economical intervention, the following hypotheses are proposed:

1. Workers who perceive their work environment negatively will score higher on burnout than workers who do not perceive their work environment negatively.

2. Workers who perceive their work environment negatively will score higher on burnout than co-workers (working in the same environment) who do not perceive their work environment negatively.

3. Work environment variables significantly related to levels of burnout in workers will vary by specific work environment.

The first hypothesis compares the work environment ratings between respondents in the total sample scoring highly on burnout and those scoring low to moderate. This approach replicates that taken by most studies which have compared work environment and burnout (Rosenberg et al., 1982; Savicki & Cooley, 1987; Weinberg et al., 1982). This
simple whole-sample correlation combines workers perceptions of several work environments (the number of worksites in the sample) into one. In other words, significant differences in perceptions of the work environment between high and low burned-out workers could be the result of differences between sites in that high burnout respondents might perceive the work environment differently from workers in other work environments but not significantly different from co-workers (working in the same micro-environment).

The second hypothesis eliminates variation in objective micro-environments by comparing perceptions of the work environment between high and low-moderately burned-out scores within teams of workers. The importance of this comparison is that they are between individuals perceptions of the same work environment.

This represents an attempt to get at both subjective and objective aspects of the work environment. In effect, similar ratings of the same objective work environment represent inter-observer reliability.

The third hypothesis asks whether the same variables are important in each of the environments. If both high and low burnout workers working in different milieus tend to rate their work environments similarly, then there is little support for the idea that the work environment measure will provide useful information. A useful work environment measure must be sensitive enough to detect subtle differences in the environment and this would be
reflected by explainable variations across different settings.
A. Introduction

A naturalistic cross-sectional study design was selected to test the hypotheses in this research. The research is exploratory-descriptive and examines the interaction between the variables of levels of burnout (independent) and perceptions of the work environment (dependent). The study examines a number of intervening variables derived from the two dimensional framework described in chapter three. These include demographic variables, age, sex, experience, education (objective-individual); objective-environmental variables such as pay, benefits, vacation time, and hours; and the subjective-environmental variables of shared ideology/methodology and special certification. A quantitative methodology was implicit as the goal is to explore the use of efficient and economical means for supervisors to gain information about the work micro-environment. Consequently, reliable measures of burnout and work environment which require less than 15 minutes to complete were selected.

B. Operational Definitions and Instruments

The operational definition of burnout used in this research is provided by Maslach & Jackson (1981) who have
developed the Maslach Burnout Inventory (MBI) and demonstrated its reliability for measuring levels of burnout in individuals. Burnout is conceptualized as involving three relatively independent symptom patterns: Emotional Exhaustion (fatigued and worn down), Depersonalization (cynicism toward clients), and Personal Accomplishment (losing a sense of accomplishment in one's work).

The Maslach Burnout Inventory is a 22-item questionnaire asking respondents how frequently they experience certain feelings. Each item is rated on a scale of 0 to 6 where 0 = never and 6 = every day. Emotional Exhaustion (EE) is assessed with 9 items (e.g., "I feel emotionally drained from my work."); Depersonalization (DP) by 5 items (e.g., "I don't really care what happens to some recipients."); and Personal Accomplishment (PA) by 8 items (e.g., "I have accomplished many worthwhile things in this job."). The MBI was standardized on samples of over 1,500 helping professionals and has shown internal reliability (Cronbach's alpha, from .71 to .90 with a mean of .79) (Maslach & Jackson, 1981).

In terms of the two dimensional model, the level of burnout is viewed as the independent variable and is a component of both the subjective-individual and objective-individual quadrants. As such, it measures workers feelings about their work (subjective) but in as objective a manner as possible. The MBI was selected both because it is
efficient and economical to use and is a reliable measure of burnout.

Work environment is assessed using the Work Environment Scale (WES) developed by Moos (1981). The WES is a 90-item true-false questionnaire containing 10 nine-item scales and has been standardized on a sample of over 3,000 staff. The WES displays an internal consistency (Cronbach's alpha) of from .86 to .69 for the 10 scales (Moos, 1981). A description of the ten scales is provided below:

**WES Subscales and Dimension Descriptions**

**Relationship Dimensions**

1. **Involvement**—the extent to which employees are concerned about and committed to their jobs.

2. **Peer Cohesion**—the extent to which employees are friendly and supportive of one another.

3. **Supervisor Support**—the extent to which management is supportive of employees and encourages employees to be supportive of one another.

**Personal Growth Dimensions**

4. **Autonomy**—the extent to which employees are encouraged to be self-sufficient and make their own decisions.

5. **Task Orientation**—the degree of emphasis on good planning, efficiency, and getting the job done.

6. **Work Pressure**—the degree to which the press of work land time urgency dominate the job milieu.
System Maintenance and System Change Dimensions

7. Clarity—the extent to which employees know what to expect in their daily routine and how explicitly rules and policies are communicated.

8. Control—the extent to which management uses rules and pressures to keep employees under control.

9. Innovation—the degree of emphasis on variety, change, and new approaches.

10. Physical Comfort—the extent to which the physical surroundings contribute to a pleasant work environment.

(Moos, 1981, 1986:2)

The WES is assumed to measure both subjective and objective aspects of the work environment. It is necessarily a measure of an individuals subjective perception of the environment and as such it rates elements of the communal makeup of a work environment. Peer Cohesion is analogous to the concept of Communion developed by Cherniss (1986). A non-cohesive work group cannot function as a "collective whole". The WES variable of Clarity is related to the concept of shared Ideology which "reduces ambiguity and self-doubt". The moral-religious paradigm concept of Guidance relates to the WES subscales of Supervisor Support, Peer Cohesion, Task Orientation, Clarity, and Autonomy. Guidance can come from supervisors, cohesive peers, good planning, and explicit routines as well as from religious faith. Autonomous action is only possible when all these "guiding" supports are in place. Cherniss'
(1986) concept of Investment, "whereby the individual gains a stake in the group", is almost identical to the WES scale of Involvement, "the extent to which employees are concerned about and committed to their jobs".

The WES System Maintenance and System Change Dimensions of Clarity, Control, Innovation, and Physical Comfort are variables describing the objective-environmental quadrant. A team of co-workers rating their work environment similarly on these dimensions are providing an objective measure of that environment based on inter-observer reliability. Conversely, a single deviant observer in a team of consistent raters may be providing a subjective measure of something other than the objective environment. On a research team this is a source of variability and error, on a social service team this might be a case of an isolated "burnout".

A demographic data questionnaire determined sex, age, race, religion degree of religiosity, marital status, length married, number of children, level of school completion, educational attainment, work area, position, hours per week, years in present job, and years in field. These variables assess objective attributes of individual respondents and allow a comparison of the sample with others in the literature. This data describes part of the objective-individual quadrant.
C. Sampling

Non-profit agencies in the lower mainland area of British Columbia employing teams of direct-care social service delivery staff were contacted by letter and invited to participate in the study. Five agencies were included in the sample: one from North Vancouver, three from Vancouver, and one from Richmond. To be eligible for the study a team of workers had to have more than four and less than 12 staff working face to face a minimum of bi-weekly. The assumption upon which this decision was made can be summarized as:

1- The work environment is a social environment made up of co-workers in frequent interaction with each other.

2- Teams larger than 12 are functioning systemically as smaller sub-teams and those smaller than 4 are not likely to represent a true (relatively complex) social environment.

This assumes that there is a functional limit to the size of ones social working environment. The assumption is that once the number of individuals in a work group exceeds about ten to twelve, then socially and functionally, the group is operating as two or more sub-systems. The selection of ten to twelve as the upper limit for a functional social system is somewhat arbitrary but is based on sound principles. A functional social system is assumed to be one where the members of that system maintain some frequent and direct communication. A dyad has only one of these "lines of communication" and a group of three has
three. As the group size increases, the number of lines of communication increase exponentially.

The mathematical formula to determine the number of relationships to be maintained where X is the number of members in the group and R is the number of relationships produced is:

\[ R = X + [(X - 3) \times 2] + (X - 4) + \ldots [X - (X - 1)] \]

Consequently, the number of relationships for a group of four, six; for a group of eight, twenty-eight; and for a group of twelve, sixty-six. To gain a visual concept of the complexity involved when group size increases, draw a series of dots in a circle and draw a line between each dot. The dots represent the individuals in a group and the lines the number of functional channels of communication necessary for the group to operate as a cohesive, interactive social-whole.

Whether work environment measures estimate features of this immediate, interactive social-work environment, features of the larger, more impersonal (less-interactive) work environment, or both, has important implications for both interpreting prior research and this study.

First, past studies have either sampled large work groups such as whole institutions composed of wards and units (Weinberg et al., 1983) or have used random selections of respondents from many different sites (Rosenthal et al., 1983). These perceptions of the work environment were then correlated with levels of burnout and generally found to be
highly interactive with certain variables such as quality of supervision and clarity in the work task. The problem is, if work environment measures are accurate, then these studies are comparing an individual phenomena, burnout, with perceptions of different objective micro work environments. Relationships between burnout and specific work environments are lost when micro-environments are collapsed into the total sample. For example, a team of 10 highly burned out workers from an unusual work environment could produce significant correlations in a larger sample where there were no other relationships between burnout and the work environment variables identified as significant.

Of the five teams participating in this study, two contained 9 members, two with 8, and one with 5 producing a total sample of n = 39. Respondents could occupy any position in the agency as long as they were in daily, direct contact with clients or were supervising those who were. Three teams were operating day programs to assist disadvantaged parents of pre-school age children to learn parenting skills while the other two were residential centers for teens. One of the residential teen programs was treatment oriented while the other was a short term assessment center. Both the teen programs were staffed on a 24 hour, 7 day basis.

The day programs are the only programs providing their service in the lower mainland while the the residential programs represent 1/4 to 1/3 of the programs providing
similar service in the same area. The two larger day programs and the teen assessment program were formerly provincially run but had been contracted out in 1984.

D. Data Collection

A pre-test was conducted using the staff of an non-profit agency not selected for the sample. No remarkable problems were encountered and the respondents completing the pre-test confirmed the ease and short time necessary to complete the data collection instruments. The pre-test enabled the researcher to provide prospective sample teams a realistic estimate of the demands on their time.

The data collection instruments were administered at regularly scheduled staff meetings on the program site. This ensured that responses were received from 100% of the members of the teams. Completion of the questionnaires took from 20 to 30 minutes and the majority of respondents completed all the items. Participation was voluntary with the qualification that teams unanimously volunteer to take part or not at all.

Team supervisors were asked to provide information for a 6-item structural variable checklist. These variables controlled for objective-environment dimension factors discussed in the section on Marxist perspectives and subjective-environmental variables outlined by Cherniss' (1986) moral-religious paradigm. The checklist included work week (9-5, Monday to Friday to shift work), salary
levels, paid annual leave, benefits, frequency of staff meetings, and whether team members utilized a specific working methodology or ideology (e.g. Montessori training) or were required to hold any special certification (e.g. child care diploma). None of the teams required any special certification or used a set methodology or ideology. As well, salaries, benefits, and paid benefits were relatively uniform across the groups. Meeting frequency varied, especially between the day and residential programs. All day programs had two or more staff meetings weekly while none of the residential programs met more than once a week.

E. Data Analysis Plan

All data obtained in this study are coded and stored in an MTS file in the University of British Columbia mainframe computer. All descriptive and statistical operations use existing programs in the Michigan Interactive Data Analysis System (MIDAS).

Demographic and background descriptive data is provided for the total sample of respondents. Total sample means and variances are calculated for the Maslach Burnout Inventory and compared with the instrument standardization sample. Work Environment Scale means and variances are compared with standardization sample means and variances for staff in the Holland "Social" occupational category.

The first hypothesis is tested by dividing the sample into high Emotional Exhaustion, Depersonalization, and
Personal Accomplishment versus low to moderate scorers on these MBI subscales. Differences in perceptions of the work environment between the two subsamples are analyzed using the Mann-Whitney U test for differences about the median. The Mann-Whitney is used due to the differences in the sizes of the subsamples. This size difference creates a significant difference in degrees of variance between the subsamples necessitating the use of a non-parametric test.

Jayartne et al. (1986) tested several hypotheses linking burnout and symptomatology and manipulated their sample by dividing respondents into equal high versus low burnout subsamples at the mean. The problem with such an approach is that other researchers (Weinberg et al., 1983) examining large samples have determined that approximately 15% of workers surveyed at any point in time will be highly burned out. Simply dividing the sample at the mean on burnout dilutes the "high burnout" sample with 35% of average to moderately burned out workers. Burnout is simply not a precise enough concept to rely on applying to anyone except those claiming to experience the most gross of its symptoms. Consequently, for a strict test of the hypotheses, only the workers scoring in the high range on burnout (as determined by Maslach & Jackson, 1981) are compared with the rest of the sample.

To further explore the overall interactivity between the MBI and the WES, the sample is divided into high, moderate, and low levels of burnout for each of the three
MBI subscales using the cut-off points provided by Maslach & Jackson (1981). The Kruskal-Wallis, a multi-sample, non-parametric test for variation about the median on the ten WES dimensions is run.

The second hypotheses is tested using the same regimen except that separate comparisons are made within each team. Not all teams contained high scorers on the three MBI subscales, consequently, analyses on all the independent variables for all teams is impossible.

The third hypothesis is tested by examining overall results from the previous tests for hypotheses. The specificity and independence of the WES and MBI would be suggested by a variety of WES findings by type and degree of burnout (eg. EE, DP, and PA) and with variation between settings.

Finally, exploratory analyses are run to examine patterns of relationships suggested by initial findings on the tests of the three hypotheses. Significant relationships between burnout and work environment are presented in tabular form throughout.

Two cautions are necessary to qualify the study findings. First, these multiple repetitions of statistical tests are bound to produce some spuriously significant findings as well as significant ones. Therefore, results must be taken only as preliminary. Replication is required to firm them up.
Second, the decision to use results from whole teams of workers mean that the study results are neither independent nor representative of the total population of workers. The variance within groups suggest that there is some degree of independence but the results probably underestimate the "real" differences amongst persons.

F. Ethical Issues

Because the overall goal of the research is to enable more specific and hopefully more effective intervention to prevent burnout, each team was offered the option of receiving feedback on the results of the study. This was an ethical decision by the researcher based on a belief that all types of interaction (including obtaining data for research purposes) contain an exchange which should be beneficial to all involved. Participants in this study have a right to know how the time they donated to completing the questionnaires was used. Hopefully those interested in the findings will derive some benefit in their personal developmental encounters with burnout.
Chapter V - Findings

A. Demographic Data

The sample contained 15 men and 24 women (37%-63%) ranging in age from 27 to 51 (mean = 34.5). Fourteen were never married, 16 presently married, and 8 were divorced or separated. All the sample were Caucasian with the exception of one Asian-Canadian male and one Native-Canadian male. All but three had received education beyond the high school level. Three were registered nurses and 27 had earned college diplomas or university degrees. The sample contained one student, a cook in daily interaction with residents, 28 front line staff, and 9 supervisors or administrators working an average of 34.5 hours per week. The average length of time in the present job was 2.8 years with 9.1 years the average time spent in the field. The mean for time in present job is depressed because three of the four large programs had been contracted out to private agencies by the provincial government approximately three years ago.

B. Maslach Burnout Inventory

Total sample means for the MBI subscales were Emotional Exhaustion-18.8, Depersonalization-6.1, and Personal Accomplishment-36.6. These averages place the sample at the cutting points between low to average levels for the MBI
subscales. Comparisons between the study sample MBI means and the MBI standardization sample by demographic categories are given in Table I.

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<th>Personal Accomplishment</th>
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<td>5.5/6.6</td>
<td>35.1/38.9</td>
</tr>
<tr>
<td>SD</td>
<td>3.2/11.1</td>
<td>2.3/5.56</td>
<td></td>
<td>5.5/7.67</td>
</tr>
<tr>
<td><strong>MARITAL STATUS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>14/732</td>
<td>20.0/24.2</td>
<td>7.5/9.3</td>
<td>37.2/35.8</td>
</tr>
<tr>
<td>SD</td>
<td>9.1/11.2</td>
<td>5.2/6.43</td>
<td></td>
<td>7.6/6.71</td>
</tr>
<tr>
<td>Married</td>
<td>17/2017</td>
<td>18.8/19.9</td>
<td>5.6/7.0</td>
<td>34.9/38.4</td>
</tr>
<tr>
<td>SD</td>
<td>7.7/10.6</td>
<td>2.9/6.02</td>
<td></td>
<td>5.6/6.74</td>
</tr>
<tr>
<td>Divorced</td>
<td>6/478</td>
<td>17.8/22.2</td>
<td>4.8/7.7</td>
<td>38.6/37.2</td>
</tr>
<tr>
<td>SD</td>
<td>12.3/11.2</td>
<td>1.7/5.97</td>
<td></td>
<td>7.0/6.73</td>
</tr>
<tr>
<td><strong>EDUCATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Col.</td>
<td>3/269</td>
<td>13.6/22.9</td>
<td>2.3/8.5</td>
<td>34.6/36.5</td>
</tr>
<tr>
<td>SD</td>
<td>3.5/11.8</td>
<td>1.5/6.86</td>
<td></td>
<td>5.1/6.97</td>
</tr>
<tr>
<td>Some Col.</td>
<td>10/664</td>
<td>17.2/21.3</td>
<td>6.5/8.0</td>
<td>33.0/35.3</td>
</tr>
<tr>
<td>SD</td>
<td>7.1/11.3</td>
<td>4.0/6.54</td>
<td></td>
<td>7.4/6.66</td>
</tr>
<tr>
<td>Col.Grad</td>
<td>12/664</td>
<td>24.5/19.8</td>
<td>8.5/7.5</td>
<td>36.9/31.4</td>
</tr>
<tr>
<td>SD</td>
<td>6.76/9.97</td>
<td>4.3/5.70</td>
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<td>5.7/6.95</td>
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<tr>
<td>Postgrad</td>
<td>13/1878</td>
<td>16.3/21.1</td>
<td>4.4/7.3</td>
<td>40.1/37.8</td>
</tr>
<tr>
<td>SD</td>
<td>10.4/10.74</td>
<td>2.6/5.67</td>
<td></td>
<td>5.8/6.42</td>
</tr>
</tbody>
</table>
The most consistent deviation of the study sample from the norms of the standardization sample was on Depersonalization where the scores were lower (except for college grads who were marginally higher). Much of this variation was from the three day-programs whose mean DP scores were 3.6 (n = 5), 5.6 (n = 9), and 5.8 (n = 8). The residential teen programs were more in line with the norms with 7.1 (n = 8) and 7.2 (n = 9). It is likely that the study sample variation on DP stems from two sources. One discussed previously is that the majority of the sample (n = 22) deals with a relatively appealing client group (disadvantaged parents and pre-schoolers vs rebellious teens). The other source of bias might be due to social desirability error. The MBI was completed in a group setting in the presence of the researcher and this may have inhibited some respondents from acknowledging frequent feelings such as: "I treat some recipients as if they were impersonal objects." and "I've become more callous toward people since I took this job."

Other notable differences were the tendency for the 41-50 age group and post-graduate educated groups to rate lower on Emotional Exhaustion. These groups are likely overlapping and are over-represented by supervisors and administrators in these staff groups of para-professional direct-care workers. That college graduates were somewhat higher than the norm in both EE and DP may indicate higher levels of frustration due to over-qualified staff in para-
professional roles. The extremely low levels of EE and DP in the no college group would be the transposition of this assumption but the numbers are too small to draw any firm conclusions.

Six staff scored at 27 or over on the Emotional Exhaustion subscale. This represents just under 16% of the total sample scoring in the high range on EE. This percentage is identical to the percentages found in a large sample (n = 724) of similar staff (demographically and occupationally) from residential facilities in the US (Weinberg et al., 1983). Four staff scored in the high range on Depersonalization and only one of these was also in the high range on EE. Seven respondents scored below the cutoff point on Personal Accomplishment which is scored in the opposite direction (i.e., low PA means high burnout). One low PA score was also a high DP and two were high EE. No respondent scored as high burnout on all three scales.

Maslach & Jackson (1981) recommend that the three scales be treated separately. However, to allow comparisons with the Savicki & Cooley study, a combined MBI measure was calculated for each respondent by adding the EE and DP to the remainder of the PA score minus the maximum possible on the PA scale (due to the reverse scoring on this scale). This calculated MBI score identified as high in burnout, all six high EE respondents, the one respondent scoring high on both the other scales, and two respondents scoring in the high-moderate range on all three scales.
The literature confirms the Emotional Exhaustion subscale of the MBI as the most potent indicator of burnout relative both to the other two subscales (Golembiewski & Munzenrider, 1981) and to other burnout instruments (Hunnicutt & MacMillan, 1983). These findings are consistent with results in the study sample. All high EE were included in the high composite MBI and make up the majority of respondents in that category.

C. Work Environment Scale

Sample means on the WES are compared with standardized sample (n = 86) means for staff in the Holland occupational category of Social in table II (Moos, 1981).
<table>
<thead>
<tr>
<th>WES</th>
<th>STANDARD MEANS</th>
<th>SAMPLE MEANS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 84)</td>
<td>(n = 39)</td>
</tr>
<tr>
<td>Innovation</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>Peer Cohesion</td>
<td>55</td>
<td>63</td>
</tr>
<tr>
<td>Supervisor Support</td>
<td>59</td>
<td>68</td>
</tr>
<tr>
<td>Autonomy</td>
<td>59</td>
<td>66</td>
</tr>
<tr>
<td>Task Orientation</td>
<td>58</td>
<td>59</td>
</tr>
<tr>
<td>Work Pressure</td>
<td>49</td>
<td>50</td>
</tr>
<tr>
<td>Clarity</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Control</td>
<td>43</td>
<td>37</td>
</tr>
<tr>
<td>Innovation</td>
<td>52</td>
<td>60</td>
</tr>
<tr>
<td>Physical Comfort</td>
<td>66</td>
<td>59</td>
</tr>
</tbody>
</table>

The study sample perceived their work environments as: higher in Involvement, Peer Cohesion, Supervisor Support, Autonomy, and Innovation; lower in Control and Physical Comfort; and about the same in Task Orientation and Work Pressure as the standardized sample. Overall, the non-profit agency employed workers in the study sample tend to average levels of burnout and see their work environments more positively than the norm.
D. Hypotheses Testing

The first hypothesis, that workers who perceive their work environment more negatively would score higher on burnout, was tested by dividing the sample into high vs average-low EE, DP, PA, and composite MBI sub-samples. The cut-off point for high burnout is given in the test manual (Maslach & Jackson, 1981). The Mann-Whitney U was calculated to test that no significant difference exists about the median for the two sub-samples. No relationship between EE and any WES sub-scales at a level of significance of $p < .05$. High EE ($n = 6$) respondents saw less Task Orientation in their work environments than low-average ($n = 33$) respondents at a level of significance of $p = .0601$ ($U = 67.5$).

The Mann-Whitney test of high ($n = 5$) vs low-average ($n = 34$) Depersonalization found high DP staff perceiving less Involvement at a level of $p = .0202$ ($U = 50.0$) and greater Control at a level of significance of $p = .0457$ ($U = 46.0$). No other relationships were significant at a $p < .1$ level. As well, no significant relationships ($p < .1$) were found between high ($n = 7$) vs low ($n = 32$) Personal Accomplishment and the WES.

With the sample divided by high composite MBI ($n = 9$) vs low-average composite MBI ($n = 30$), highly burntout staff perceived less supervisor support at a significance level of $p = .0361$ ($U = 73.0$). As well, the high MBI respondents rated their work environments as lower on Clarity ($U = $
100.0) and Task Orientation (U = 45.5) than low-average workers at a level of significance of p = .0797 on both variables.

A test for the statistical association of burnout and work environment was made by dividing the sample into high, average, and low sub-samples by EE, DP, and PA (PA reversed). The cut-off points for these categories are taken from the test manual (Maslach & Jackson, 1981). The Kruskal-Wallis, a non-parametric test for significant variation about the median, was run due to the differences in within-sample variance between the two sample groups.

With Emotional Exhaustion as the dependent variable, a significant relationship (p = .0342) was found with the WES subscale of Clarity (Degrees of Freedom = 2, Kruskal-Wallis statistic = 6.75). The higher respondents scored on EE, the less Clarity they perceived in their work environment. No other significant relationships were found.

With Depersonalization, respondents scoring higher on this burnout measure perceived significant differences in Peer Cohesion (p = .0404, DF = 2, K-W stat = 6.41) and Innovation (p = .0210, DF = 2, K-W stat = 7.73). On the burnout measure of Personal Accomplishment, no significant differences were found on the WES subscales.

Kruskal-Wallis tests on the sample divided by high (n = 9), average (n = 13), and low (n = 17) composite MBI found higher burntout workers perceiving less Clarity in their work environment at a level of significance of p = .0076 (DF
The second hypothesis, that workers viewing their work environments more negatively will score higher on burnout than co-workers, was tested by dividing the samples as described above and analyzing them by work group using the Mann-Whitney. In a follow-up analysis, the Kruskal-Wallis was run for EE and composite MBI. Too few respondents fell into the high DP and PA to permit comparable within group analysis by these variables.

Work group 1 (large day program, n = 8) had 4 workers scoring in the low range on EE, 2 in the average range, and 2 in the high range. No relationships significant at a $p < .1$ level were found using the Mann-Whitney test to compare the two high EE respondents with their remaining seven co-workers.

The Kruskal-Wallis produced no relationships significant at a level of $p < .05$ on any WES scale. Higher EE tended to see less Supervisor Support ($p = .0771, \text{DF} = 2, \text{K-W stat} = 5.12$) and greater Work Pressure ($p = .0695, \text{DF} = 2, \text{K-W stat} = 5.33$) at a level of significance of $p < .1$.

Group 1 had no respondents scoring in the high range of Depersonalization. Mann-Whitney comparisons of high composite MBI (n = 2) vs those in the low-average range (n = 6) produced no relationships significant at $p < .1$ with the WES. However, the Kruskal-Wallis showed those scoring in the average range rated their work environment as significantly
(p = .0253, DF = 1, K-W stat = 5.0) lower on Innovation than low DP respondents. No significant relationships were found between DP and the other WES scales and no relationships were noted between Personal Accomplishment and WES within this group.

No workers in the small day program (n = 5) scored high on any of the burnout measures and tended as a group to have very similar perceptions of their work environment. There were no significant relationship between any MBI and WES variables at p < .1. This work group displayed very little variation on any of the MBI or WES measures. Therefore, it is likely that the lack of any relationships was simply due to the small numbers involved.

Group 3 (day program, n = 9) had 3 staff low in EE, 4 average EE, and 2 high EE. The Mann-Whitney produced no significant relationships between high EE and the WES. On the composite MBI, the high burntout staff (n = 3) rated their work environments as lower in Supervisor Support than low-average MBI (n = 6) at a $p = .0476 (U = .50$ level of significance. They also perceived less Task Orientation ($U = 1.5$) and less Clarity ($U = 1.5$) at $p = .0833$ in both cases.

With the Kruskal-Wallis, no relationships significant at $p < .05$ were found but higher EE was associated with higher perceived Control at $p = .0786 (DF = 2, K-W stat = 5.08)$. This group had no respondents scoring in the high Depersonalization range and there were no relationships
between DP and the WES significant at $p < .05$. Average DP respondents saw their work environment as lower in Task Orientation at $p = .0528$ (DF = 1, K-W stat = 3.75) and lower in Supervisor Support at $p = .0933$ (DF = 1, K-W stat = 2.81). No significant relationships between Personal Accomplishment and WES were found in group three.

Group 4, a teen assessment centre ($n = 9$), had one respondent scoring in the high EE range, 5 in the average range, and 3 in the low range. Group 4 had too few cases for a high EE vs low-average comparison using the Mann-Whitney. Division of this group into high vs low-average composite MBI produced no significant relationships with work environment.

Using the Kruskal-Wallis, no relationships between Emotional Exhaustion and the WES were significant at a $p < .05$ but higher EE respondents perceived less Clarity at a level of $p = .0671$ (DF = 2, K-W = 5.40). No relationships between either DP or PA were significant at a $p < .1$ level.

Group 5, the teen treatment center ($n = 8$), had one staff high in EE, 4 in the average range, and 3 low in EE. This group had too few cases for a Mann-Whitney comparison by EE and no significant relationships were found between composite MBI and WES with this test. This group had 2 staff scoring high in Depersonalization, one in the average range and 5 in the low range.

The Kruskal-Wallis showed no significant relationships between Personal Accomplishment and any Work Environment
Scale items at a level of $p < .1$. One relationship was significant at a level of $p < .1$; higher DP staff perceived less Innovation in their work at a level of $p = .0907$ (DF = 2, K-W stat = 4.8).

All of these statistically significant within-team findings are summarized below in table IV. These results must be viewed as tentative since multiple significance tests of the relationship between two variables will count some "chance" relationships as "significant". This is due to type I error.
TABLE III
Within-Group Comparisons on Median Scores between Burnout (MBI) and Work Environment (WES)

Variables Significant at the .10 level using the Mann-Whitney U test

<table>
<thead>
<tr>
<th>Group 3</th>
<th>variables</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Composite MBI &lt;Supervisor Support</td>
<td>.50</td>
<td>.0476</td>
</tr>
<tr>
<td></td>
<td>&lt;Task Orientation</td>
<td>1.5</td>
<td>.0833</td>
</tr>
<tr>
<td></td>
<td>&lt;Clarity</td>
<td>1.5</td>
<td>.0833</td>
</tr>
</tbody>
</table>

Variables Significant at the .10 level using the Kruskal-Wallis test

<table>
<thead>
<tr>
<th>Group 1</th>
<th>variables</th>
<th>K-W*</th>
<th>p</th>
<th>DF**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Depersonalization (no high)</td>
<td>5.0</td>
<td>.0253</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>&lt;Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotional Exhaustion</td>
<td>5.12</td>
<td>.0771</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&lt;Supervisor Support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;Work Pressure</td>
<td>5.33</td>
<td>.0695</td>
<td>2</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Group 3</th>
<th>variables</th>
<th>K-W*</th>
<th>p</th>
<th>DF**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Exhaustion</td>
<td>5.08</td>
<td>.0786</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&gt;Control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Depersonalization (no high)</td>
<td>3.75</td>
<td>.0528</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>&lt;Task Orientation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>&lt;Supervisor Support</td>
<td>2.81</td>
<td>.0933</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 4</th>
<th>variables</th>
<th>K-W*</th>
<th>p</th>
<th>DF**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Emotional Exhaustion</td>
<td>5.40</td>
<td>.0671</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&lt;Clarity</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 5</th>
<th>variables</th>
<th>K-W*</th>
<th>p</th>
<th>DF**</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Depersonalization</td>
<td>4.8</td>
<td>.0907</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>&lt;Innovation</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: K-W* = Kruskal-Wallis statistic
      DF** = degrees of freedom
E. Exploratory Data Analysis

Exploratory analyses were suggested by initial descriptive findings. They should be viewed as suggestive of hypotheses, not as tests of hypotheses, since they are based on preliminary findings. First, all the high Depersonalization respondents were found to be from the two residential programs. This finding is not surprising as the residential centers deal with disturbed, rebellious, or acting-out teens. As such, staff in these facilities are targets for their clients angry behaviors, a situation placing extreme demands on staffs ability to maintain an empathic stance toward clients. Clients for the day programs are disadvantaged (needing training for parenting skills) parents and and their preschool aged children. Certainly some of these clients are considered "difficult" but on the whole they must be less likely to engender depersonalized attitudes in staff than the teen group.

The second suggestive finding was that the small day program (n = 5) contained no respondents scoring as high in any MBI category. As well, staff in this program tended on the whole to perceive their work environment more uniformly positive than other groups. Some of this lack of variance may attributable to their lower numbers (5 versus 8 or 9). Nevertheless the notable differences between this program and the others along with the differences between the target client groups suggested a day versus residential program comparison excluding the small staff group. Consequently,
the procedures described above were replicated within subsamples of large day (n = 17) versus residential (n = 17) programs.

**Residential and Day Program Comparisons**

The two day programs were identical contracted programs run by different agencies serving separate parts of town. Both had been provincially run until 1984. One contained nine respondents, the other had eight. One residential program (n = 9) was a short term assessment and referral facility contracted out in 1984. The other residential program (n = 8) had been a private contract for several years but had experienced a reorganization and change of its parent non-profit agency in 1982.

Background differences between residential and day program respondents were: day program staff were married longer; had more children living with them, and were slightly higher in educational attainment. Day program staff were more likely to describe their area of work "social service" while residential staff were more likely to describe their work area as "counselling". Residential staff had significantly more annual leave, worked longer hours (36.4 v 33.8), and attended fewer weekly staff meetings than day program staff. Mean age between the groups was similar (R = 35.2 / D = 35.4) as was religiousity (4.1 v 4.5) and years in the field (9.8 v 9.1). The greatest variation between the groups was in sex
composition. Day programs were staffed with 71% women while women made up 47% of the staff in residential programs.

The Mann-Whitney test for significant differences about the median was run comparing high versus moderate and low scorers on Emotional Exhaustion, Depersonalization, and Personal Accomplishment for residential, day program, and the total group (n = 34, minus the small day program). Results are tabulated below:

**TABLE IV**

Comparisons Between Burnout (MBI) and Work Environment (WES)

Variables Significant at the $P = .10$ Level
Using the Mann-Whitney U

<table>
<thead>
<tr>
<th>MBI variables</th>
<th>WES</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depersonalization</td>
<td>&gt;Control</td>
<td>45.5</td>
<td>.0222</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
<td>&lt;Task Orientation</td>
<td>60.5</td>
<td>.0703</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MBI variables</th>
<th>WES</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Accomplishment</td>
<td>&lt;Physical Comfort</td>
<td>4.5</td>
<td>.0147</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MBI variables</th>
<th>WES</th>
<th>U</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Exhaustion</td>
<td>&lt;Supervisor Support</td>
<td>7.5</td>
<td>.0987</td>
</tr>
<tr>
<td></td>
<td>&lt;Task Orientation</td>
<td>13.0</td>
<td>.0525</td>
</tr>
<tr>
<td>Personal</td>
<td>&gt;Work Pressure</td>
<td>12.0</td>
<td>.0824</td>
</tr>
</tbody>
</table>

As in the earlier findings, the most notable aspect of these differences in perceptions of the work environment between high burnout workers those scoring low is the lack
of consistency in results when workers are compared with the
total sample and when compared with their smaller reference
groups. That residential workers rating lower on Personal
Accomplishment perceived lower levels of Physical Comfort is
enigmatic and likely represents a spurious finding.

The Kruskal-Wallis test for differences about the
median between between low, moderate, and high scores on the
MBI was duplicated. The results are presented in the table
below.

<table>
<thead>
<tr>
<th>TABLE V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparisons Between Burnout (MBI) and Work Environment (WES)</td>
</tr>
<tr>
<td>Variables Significant at the $P = .10$ Level</td>
</tr>
<tr>
<td>Using the Kruskal-Wallis Test</td>
</tr>
<tr>
<td><strong>total residential &amp; day programs (n = 34)</strong></td>
</tr>
<tr>
<td>Depersonalization</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>residential program (n = 17)</strong></td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Personal Accomplishment</td>
</tr>
<tr>
<td><strong>day program (n = 17)</strong></td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
</tr>
<tr>
<td>Depersonalization</td>
</tr>
</tbody>
</table>

*note. $K-W^*$ = Kruskal-Wallis statistic
$DF^{**}$ = degrees of freedom
The Kruskal-Whitney exposes more inter-activity between the MBI and WES by testing for differences across a broader range of burnout levels. The lack of consistency between total sample results and reference group results is repeated. The results are stronger in the above comparisons. The sample is grouped into two subsamples each containing two work groups with very similar environments. The variation between the subsamples (n = 17) is relatively minor and known; client group, sexual composition, shift work versus nine to five, marital status, frequency of staff meetings, and annual leave. The implication is that the differences in perceptions of work environments are narrowed down to these variables.

The residential staff contained all respondents scoring high on Depersonalization yet no significant differences in perceptions of work environment were revealed between high, moderate and low co-workers on the Kruskal-Whitney. It is clear that "type of client group" has an important relationship to feelings of alienation from clients (DP).

Low (n = 6), moderate (n = 9), and high (n = 2) Emotional Exhaustion respondents from the residential programs differed on Involvement ($p = .0476$) and Clarity ($p = .0432$). On both variables most of the variance was from the moderate category where five of the nine rated these environmental factors lower than either high or low EE respondents. It is important to note that there is no
linear relationship where the higher the EE the lower the perceived Involvement and Clarity.

Significant differences ($p = .0305$) in Physical Comfort within the residential group were repeated with the Kruskal-Wallis. In this instance, the higher the worker scored in Personal Accomplishment, the higher they rated their physical environment. This is the only finding which might suggest a lack of discrimination between the WES and MBI. Perhaps the less satisfaction and accomplishment workers feel the more likely they are to complain about the decor, lighting, heating, and ventilation.

The apparent specificity of the WES in discriminating between residential and day program work environments suggested a comparison of the two subsamples across all the MBI and WES variables. Consequently, the Mann-Whitney U was run to test for significant differences about the median on all the WES and MBI variables between the residential and day programs. No differences were found in MBI scores. The differences in WES scores are tabulated below.
TABLE VI

Mann-Whitney U Test for Significant Differences About the Median between the Day (n = 17) and Residential Programs (n = 17) on the Work Environment Scale

<table>
<thead>
<tr>
<th>WES Variable</th>
<th>Result</th>
<th>p</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>Involvement</td>
<td>day program higher</td>
<td>p = .0019 (U = 60.0)</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>day program higher</td>
<td>p = .0194 (U = 78.0)</td>
<td></td>
</tr>
<tr>
<td>Work Pressure</td>
<td>day program higher</td>
<td>p = .0174 (U = 76.0)</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>day program lower</td>
<td>p = .0006 (U = 47.5)</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>day program higher</td>
<td>p = .0103 (U = 71.0)</td>
<td></td>
</tr>
</tbody>
</table>

These results are consistent with expected differences between the two types of programs. Workers in residential programs for youth work in a day to day, living situation with their clients and deal with fewer numbers of clients than workers in the day programs. Consequently, the work pressure would be expected to be lower than in the day programs where larger numbers of parents and children are dealt with in a shorter span of time. Working in a residential program means that brief periods of counselling take place within long periods of custodial care. Thus lower ratings on Involvement, Autonomy, and Innovation are to be expected for the residential workers.

The higher rating on Control for residential workers is likely related to the rigid demands of shift work and the
importance of staff consistency in working with children. The necessity of a firm rule structure in residential centers places constraints on the ability of staff to exercise autonomy and experiment with creative solutions; in other words, they are as governed by the "house rules" as the children.

**Comparison with the Savicki & Cooley Findings**

Because of the similarity in both instruments and type of sample between this research and a study published earlier by Savicki & Cooley (1987), some comparisons are made between the finding of the present study and the earlier research. Savicki & Cooley (1987) had examined the role of the moderator variable of "amount of direct client contact" in an examination of the relationship between work environment and burnout. Amount of direct client contact is not a variable in this research but is simulated by dividing the sample into line versus administrative and supervisory staff. Savicki & Cooley (1987:251) had noted that "The distinction between high and low contact workers was primarily one between the role of "on line" workers versus the role of supervisors and administrators."

Savicki & Cooley (1987) correlated the composite MBI score with WES and found a significant ($p < .05$) relationship with 28 of the 40 possible and with 8 of the 10 ($p < .01$) WES subscales using the MBI composite. The only scales not correlating significantly were Physical Comfort
and Work Pressure. Using the total study sample (n = 39), only 7 of the 40 relationships were significant at $p < .05$ and only one relationship, with Clarity ($p < .01$) was noted with the composite MBI. In total, five of the ten WES scales correlated significantly with the four MBI measures. No significant relationships were found with Personal Accomplishment. These results are given in table VIII below.

<table>
<thead>
<tr>
<th>Maslach Burnout Inventory - R - Work Environment Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Composite MBI</td>
</tr>
<tr>
<td>Emotional Exhaustion</td>
</tr>
<tr>
<td>Depersonalization</td>
</tr>
<tr>
<td>Clarity</td>
</tr>
<tr>
<td>Clarity</td>
</tr>
<tr>
<td>Work Pressure</td>
</tr>
<tr>
<td>Supervisor Support</td>
</tr>
<tr>
<td>Innovation</td>
</tr>
<tr>
<td>Peer Cohesion</td>
</tr>
<tr>
<td>Clarity</td>
</tr>
</tbody>
</table>

Note. For all items: $N = 39$

Degrees of Freedom = 37

$R @ .0500 = .3160$
The most notable difference between the results of the two studies is on the composite MBI score. In the Savicki & Cooley sample (1987), their "summary MBI" was apparently more highly correlated with the WES. The article did not specify how the three MBI scores were translated into this summary score. They may have used a different formula accounting for some of the difference. Otherwise, the difference in sample sizes may be responsible.

Savicki & Cooley (1987) ran a stepwise multiple regression with EE, DP, and PA against WES scales and then ran separate multiple regressions of MBI against WES for high and low contact workers. The small sample size of this study did not allow for a replication of these procedures however the Mann-Whitney U test for significant differences about the median between line workers (n = 26) and supervisors and administrators (n = 8) was run. The Mann-Whitney U found no significant differences between these subsamples on work environment.
Chapter VI - Conclusion

A. Conclusions

The findings of this research suggest that burnout is complexly related to the work environment. Eight of the ten WES sub-scale items were identified in a negative direction by workers experiencing higher levels of burnout at $p < .10$ or better levels of significance. Negative direction on the WES is considered to be lower on the scales of involvement, peer cohesion, supervisor support, task orientation, clarity, innovation, and physical comfort, and higher on the scales of work pressure and control. This complexity is further suggested by the fact that the Kruskal-Wallis test examining the sample by high, average, and low levels of burnout found no results in common at $p < .05$ with the Mann-Whitney test comparing high with average-low sub-samples.

The test of the first hypothesis, that highly burned out workers will rate their work environment more negatively, is not conclusive. Using the strictest interpretation, that is, only comparing high Emotional Exhaustion or Composite MBI (the most salient burnout indicators) with the rest of the sample (Mann-Whitney test of high vs low-average) at a $p < .05$ significance level, produces the result: highly burned out workers in the study sample perceive less Supervisor Support than low-average
workers. Consequently, hypothesis 1 is not supported for all WES subscale items except Supervisor Support.

Taking Depersonalization as the burnout indicator produces the finding that "workers with higher levels of DP see their work environment as lower in Innovation and higher in Control." These high DP respondents (n = 4) were all staff members in the residential programs which had much higher means on DP than the day programs (perhaps due to a less attractive client group). Considering that the high DP were in reality a sub-sample of groups four and five only, this variation on Innovation and Control by comparing high DP with the total sample must be viewed with caution.

(Better to compare high DP against total groups 4 and 5.)

Total sample comparisons using the Kruskal-Willis (at p < .05 & disregarding DP for the reasons discussed above) were suggestive. Both Emotional Exhaustion and composite MBI were associated with perceptions of less Clarity in the work environment. (This is not really a "double finding" as high EE and high composite MBI respondents were almost identical.) The finding is "the higher a staff person placed along low-average-high EE, the more likely they were to rate their work environment as lower in Clarity."

Clarity refers to the predictability of daily routines and how explicitly rules and policies are communicated. Studies using the MBI and the WES consistently identify Clarity as an important correlate of burnout but are mixed in the emphasis placed on its importance. Berkley Planning
Associates (1977) and Rosenthal et al. (1983) found Clarity highly associated with burnout while MacMillan & Hunnicutt (1983) and Savicki & Cooley (1987) place a low priority (relative to other WES) on this dimension.

Applying the same strict test to the second hypothesis, that highly burned out workers will perceive their work environment more negatively, produces the result: highly burned out workers in group 3 perceive less Supervisor Support than co-workers. Therefore, hypothesis 2 is not supported for all the co-worker groups except group 3 where the hypothesis is rejected for all WES items except Supervisor Support.

Both the findings for Supervisor Support were produced using the variable, composite MBI. Maslach & Jackson (1981) warn against combining the MBI subscales so these results must be interpreted with caution. Numerous studies have identified the important role supervisors play in either preventing or facilitating burnout in their staff (Berkley Planning Associates, 1977; Daley, 1979; Brady et al., 1980; Borland, 1981; Rosenthal et al., 1983; MacMillan & Hunnicutt, 1983; Savicki & Cooley, 1987). Supervisor Support is one aspect of the work environment that is more related to an individual relationship (the respondent and their supervisor) than to the general group milieu. The implication is that two workers on the same team could be experiencing very different qualities of supervision.
The lack of support for the first two hypotheses substantiates the conceptual and experimental independence of the WES and MBI and hence, support the third hypothesis, that work environment variables significantly related to levels of burnout in workers will vary by specific work site. Overall, the two instruments appear to measure quite different subjective perceptions of respondents. A univariate analysis of variance run on the three MBI and ten WES variables by group support this contention. None of the groups differed significantly on the MBI items yet there was variance at $p < .01$ on six of the 10 WES subscales. Involvement, Supervisor Support and Clarity varied by group at $p = .0310$, $p = .0774$ and $p = .0735$ respectively. Variance between groups on Peer Cohesion was significant at $p = .1079$. Different work environments would be expected to produce a range of results on a scale validly measuring those environments while similar levels of burnout would be expected in workers doing similar jobs. As it were, when WES items were associated with MBI scores, it was selectively by group and type of burnout (i.e. EE, DP, & PA).

B. Implications for Intervention and Research

Using the WES and MBI together can provide a very specific diagnostic picture for both individuals and teams. A work team scoring uniformly high on an MBI item with similar perceptions of an environmental deficiency would
provide a very specific prescription. In this case the target for intervention would be improvement of the environment attribute.

Various means could be employed to use the WES and MBI in working to prevent burnout in teams of workers. At one level, individuals might self-administer and score the scales to gain an understanding of their level of burnout and their feelings toward the work environment. Ideally, teams would work together and pool their results on the MBI and WES perhaps following a "nominal group process" as described by Johnson & Richards (1983). This is a small group decision-making process offering a structured method for problem identification and resolution and involves participants in defining and solving their own problems.

Using a method such as a nominal group process has obvious benefits based on prior research findings. Berkley Planning Associates (1977) were the first to note that "centralized decision making" was significantly related to burnout. Hunnicutt & Macmillan's (1983) finding that "involvement in program development" was an important causal factor in reducing levels of burnout supported the earlier finding and points out the need for work teams to be actively involved in exercising control over their work environment to prevent burnout.

Using a methodology like a nominal group process to involve workers in ongoing program development to prevent burnout is described by the "environment" half of the two
dimensional framework. Engaging in an interactive group process is one means of forging a shared, communal group reality discussed under the subjective-environmental quadrant. When such a group has as an option making interventions in their objective work environment, then they are intervening in the objective-environmental quadrant.

The development of an existential perspective on burnout has also been productive in suggesting avenues for intervention. None of the burnout intervention research has dealt with working with the subjective, experiential life-world of workers. Forman (1983) has come close with a suggestion for "cognitive-behavioral programs" to develop coping skills in individuals. Cognitive-behavioral approaches are developed from behaviorist psychology and involve a conscious attempt to modify one's own behavior through a form of self-dialogue. Despite its scientific theoretical formulation, this approach is in reality a form of "reframing" where subjects are taught to view events in the work in a different perspective. In effect, the worker is provided with a "new cognitive framework" for understanding stressful stimuli from the work environment. This amounts to working with a worker's subjective life-world to alter the way they interpret experience and provides a means of intervening in the subjective individual quadrant.

Additionally, this study has reaffirmed the connection between leadership and supervision and levels of burnout in staff. Every study on burnout which has examined the role
of supervision has found that it is a key correlate of burnout regardless of what method or instrument was used to examine the work environment. Despite the methodological limitations of the present study, lower perceptions of supervisor support was consistently associated with higher levels of burnout.

This study has demonstrated the attractive potential of using the work environment and burnout measures together to guide intervention in work teams. More work is needed to explore the full range of possibilities and limitations but the potential applications to burnout intervention are promising.

Perhaps the most important implication for future burnout research illustrated by the present study is simply the reliability, efficiency, and accuracy of both the Maslach Burnout Inventory and the Work Environment Scale. These instruments are powerful measures of burnout and work environment which provide researchers with excellent, easily administered tools for research. The ability of the WES to generate accurate pictures of the work environment relatively uncontaminated by levels of burnout in respondents is especially important for both research and intervention.

The two dimensional framework for viewing burnout developed in this study may also some promise for future burnout research. Viewing burnout as existing along continuums of individual-environmental and subjective-
objective does not constitute a "model" of burnout in the usual sense. The concept of burnout as it is presently defined and developed is still very broad and diverse. As such, it defies attempts at explanation using simple causal models and the broad models which have been developed are cluttered with variables. The two dimensional framework offers a general paradigm for organizing both burnout variables, theoretical perspectives, and simple causal models. As such, the framework offers a simpler way of categorizing burnout research with the potential of leading to a unified model or perhaps partial models describing one or two quadrants.

And finally, the present study has highlighted the need for more studies examining burnout over time. Burnout research has reached a plateau where any important advances must come from longitudinal studies. The questions which still need answering are: Do all workers burnout and to what degree? How can burnout be understood in a developmental context and can it have a positive, educative impact on workers? Is the average 15% of highly burned out staff a stable group, do the same workers tend to burnout over and over, and is burnout a chronic ongoing condition for a few workers? And Finally, do environmental factors relating to burnout change over time and, if so, how?
C. Summary

This study has reviewed the extensive literature on burnout and traced the origins and development of the concept. A number of different theories and perspectives were examined and a two dimensional framework for organizing burnout variables and theory was developed and presented. This framework classifies burnout along continuums of subjective versus objective and individual versus environmental and was used to organize and guide the research.

The research component of this study sought to explore the possibilities for intervention in the work environment to reduce burnout and to illustrate the feasibility of using the Maslach Burnout Inventory and the Work Environment Scale for the assessment of burnout and the direction of efforts for intervening in the work environments of the agencies studied. Although the results of the study are limited in scope and generalizability, the overall indication is that using reliable measures of burnout and work environment together is a productive approach for intervening in micro-work environments to prevent burnout.
BIBLIOGRAPHY


Appendix A

Maslach Burnout Inventory (Maslach & Jackson, 1981, 1986)

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

Statements: Answered as to how often you feel about your job.

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 recipients feel about things.
5. I feel I treat some recipients as if they were impersonal objects.
6. Working with people all day is really a strain for me.
7. I deal effectively with the problems of my recipients.
8. I feel burned out from my work.
9. I feel I'm positively influencing other peoples lives through my work.
10. I've become more callous toward people since I took this job.
11. I worry that this job is hardening me emotionally.
12. I feel very energetic.
13. I feel frustrated by my job.
14. I feel I'm working too hard on my job.
15. I don't really care what happens to some recipients.
16. Working with people directly puts too much stress on me.
17. I can easily create a relaxed atmosphere with my recipients.
18. I feel exhilarated after working closely with my recipients.
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 recipients blame me for some of their problems.

(scores equal sum of total frequency)
Emotional Exhaustion = items: 1, 2, 3, 6, 8, 13, 14, 16, & 20.
Depersonalization = items: 5, 10, 11, 15, & 22.
Personal Accomplishment = items: 4, 7, 9, 12, 17, 18, 19, & 21.
Appendix B

Work Environment Scale (Moos, 1981, 1986)
(all questions answered true or false)

Involvement
1. The work is really challenging.
11. There's not much group spirit.
21. A lot of people seem to be just putting in time.
31. People seem to take pride in the organization.
41. People put quite a lot of effort into what they do.
51. Few people ever volunteer.
61. It is quite a lively place.
71. It's hard to get people to do any extra work.
81. The work is usually very interesting.

Peer Cohesion
2. People go out of their way to help a new employee feel comfortable.
12. The atmosphere is somewhat impersonal.
22. People take a personal interest in each other.
32. Employees rarely do things together after work.
42. People are generally frank about how they feel.
52. Employees often eat lunch together.
62. Employees who differ greatly from others in the organization don't get on well.
72. Employees often talk to each other about their personal problems.
82. Often people make trouble by talking behind others' backs.

**Supervisor Support**

3. Supervisors tend to talk down to employees.

13. Supervisors usually compliment an employee who does something well.

23. Supervisors tend to discourage criticisms from employees.

33. Supervisors usually give full credit to ideas contributed by employees.

43. Supervisors often criticize employees over minor things.

53. Employees generally feel free to ask for a raise.

63. Supervisors expect far too much from employees.

73. Employees discuss their personal problems with supervisors.

83. Supervisors really stand up for their people.

**Autonomy**

4. Few employees have any important responsibilities.

14. Employees have a great deal of freedom to do as they like.

24. Employees are encouraged to make their own decisions.

34. People can use their own initiative to do things.

44. Supervisors encourage employees to rely on themselves when a problem arises.

54. Employees generally do not try to be unique and different.
64. Employees are encouraged to learn things even if they are not directly related to the job.
74. Employees function fairly independently of supervisors.
84. Supervisors meet with employees regularly to discuss their future work goals.

**Task Orientation**

5. People pay a lot of attention to getting work done.
15. There's a lot of time wasted because of inefficiencies.
25. Things rarely get "put off till tomorrow."
35. This is a highly efficient, work-oriented place.
45. Getting a lot of work done is important to people.
55. There's an emphasis on "work before play."
65. Employees work very hard.
75. People seem to be quite inefficient.
85. There's a tendency for people to come to work late.

**Work Pressure**

6. There is a constant pressure to keep working.
16. There always seems to be an urgency about everything.
26. People cannot afford to relax.
36. Nobody works too hard.
46. There is no time pressure.
56. It is very hard to keep up with your work load.
66. You can take it easy and still get your work done.
76. There are always deadlines to be met.
86. People often have to work overtime to get their work done.
Clarity

7. Things are sometime pretty disorganized.
17. Activities are well-planned.
27. Rules and regulations are somewhat vague and ambiguous.
37. The responsibilities of supervisors are clearly defined.
47. The details of assigned jobs are generally explained to employees.
57. Employees are often confused about exactly what they are supposed to do.
67. Fringe benefits are fully explained to employees.
77. Rules and policies are constantly changing.
87. Supervisors encourage employees to be neat and orderly.

Control

8. There's a strict emphasis on following policies and regulations.
18. People can wear wild looking clothing while on the job if they want.
28. People are expected to follow set rules in doing their work.
38. Supervisors keep a rather close watch on employees.
48. Rules and regulations are pretty well enforced.
58. Supervisors are always checking on employees and supervise them very closely.
68. Supervisors do not often give in to employee pressure.
78. Employees are expected to conform rather strictly to the rules and customs.
88. If an employee comes in late, he can make it up by staying late.

Innovation

9. Doing things in a different way is valued.
19. New and different ideas are always being tried out.
29. This place would be one of the first to try out a new idea.
39. Variety and change are not particularly important.
49. The same methods have been used for quite a long time.
59. New approaches to things are rarely tried.
69. Things tend to stay just about the same.
79. There is a fresh, novel atmosphere about the place.
89. Things always seem to be changing.

Physical Comfort

10. It sometimes gets too hot.
20. The lighting is extremely good.
30. Work space is awfully crowded.
40. This has a stylish and modern appearance.
50. This place could stand some new interior decorations.
60. The colors and decorations make the place warm and cheerful to work in.
70. It is rather drafty at times.
80. The furniture is usually well-arranged.
90. The rooms are well ventilated.
Appendix C

Demographic Data Questions

Your sex: male-

female-

Your age: years-

Are you (check only one group)

Asian

Black

Latino, Hispanic

Native American, Indian

White

Other (please specify-)

What is your religion?

Protestant (specify denomination-)

Roman Catholic

Jewish

Other (please specify-)

None, no religion

How religious do you consider yourself to be? (Circle the appropriate number.)

1 2 3 4 5 6 7

(1 = very religious; 7 = not at all religious)
Marital status:

- single
- married
- divorced
- widowed
- other (please specify-)

If married, for how long have you been married to your current spouse?

__ years

If you have children, how many of them are now living with you?

__ children live with me

__ I have no children

What was the highest level you completed in school? (Check only one answer.)

- completed high school
- some college
- completed four years of college
- some postgraduate work or degree
- other (please specify-)

Please check the highest degree you have received:

- B.A./B.S.
- B.S.W.
- R.N.
- M.A./M.S.
- M.S.W.
- B.S.N.
- Ph.D.
- 1 year College Diploma
- 2+ years(s) Col. Diploma.
- other (please specify-)
What is the primary area in which you work? (Check only one answer.)

mental health
education
social services
counseling
other (please specify-)

What is the level of your primary position? (Check only one answer.)

staff member
supervisor / manager
administrator
other (please specify-)

How many hours per week do you work at the job indicated above? ___ hours per week

How long have you been at your present job? ___ years

How long have you been employed for this general type of work? ___ years
Appendix D

Structural Variable Checklist

work week
- nine to five, monday to friday
- nine to five, monday to monday
- shift work

yearly salary
- $18,000 or less
- $18,001 to $24,000
- $24,001 to $30,000
- over $30,000

annual leave
- 2 weeks or less
- 2 to 3 weeks
- over 3 weeks

benefits
- none
- paid medical insurance
- extended medical
- dental plan

staff meeting frequency
- less than weekly
- weekly
- twice weekly
- more than twice weekly
<table>
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<tr>
<th>Methodology / Ideology</th>
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<th>Yes</th>
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<tr>
<td>Special Certification</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Sample Worksite Number</td>
<td>(five sites numbered sequentially)</td>
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