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THE RELATIONSHIP AMONG ADAPTATION,
STRESSORS, JOB STRESS, AND BURNOUT:
AN INVESTIGATION OF A MODEL
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THE RELATIONSHIPS AMONG ADAPTATION, STRESSORS, JOB STRESS, AND BURNOUT: AN INVESTIGATION OF A MODEL

By

William C. Horst

A DISSERTATION

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ABSTRACT

THE RELATIONSHIPS AMONG ADAPTATION, STRESSORS, JOB STRESS, AND BURNOUT: AN INVESTIGATION OF A MODEL

By

William C. Horst

The presence of job stress and burnout in service providers has become an increasingly critical factor in the provision of services to a wide variety of people. How well any service is provided can be linked to the characteristics of the service provider and how well the serivce provider balances internal needs with external demands. The purpose of the present study was to (a) link the literature on occupational stress with that of burnout, (b) investigate the relationship between job stress and burnout for the first time, (c) investigate a model which integrated occupational stress and burnout through a causal analysis, and (d) propose a working model of job stress-burnout for further investigation.

A sample of 231 human services' employees at a Midwestern community mental health center was administered questionnaires. The questionnaire was completed by 206 employees for an 89.2% completion rate. Respondents completed the questionnaire in staff meetings with no identifying information being requested.

A correlational analysis was used to test the initial hypotheses and a path analysis was used to assess both the causal relationships of the model variables and the job stess-burnout model. The model was developed based on theory and

research which are extensively reviewed. Adaptation, role ambiguity, role conflict, role overload, job stress, and burnout are the variables tested within the model. A theory trimming method was used to delete nonsignificant causal paths and a new working model was proposed.

Results presented are a positive relationship between job stress and both frequency (.56) and intensity (.50) of burnout with the job stress-frequency relationship being significantly higher than that of job stress-intensity. In the path analysis, significant causal paths were identified for adaptation with job stress and burnout, for role ambiguity with job stress, for role conflict with job stress and burnout, for role overload with burnout, and for job stress with burnout. The job stress-burnout model was found to fit the data.

Based on their relationship to at least three model variables in an exploratory correlational analysis, four variables were identified as having potential for future research: (a) perceptual difference between an employee's job and perceived actual ability, (b) changes on the job, (c) perceived supervisory support, and (d) perceived authority to make job decisions.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

THE PROBLEM

The word burnout was first used in an article by Freudenberger (1974). Since that time, the term has appeared to capture the imagination of the public and media. An explosion of articles has been published as well as a proliferation of workshops and inservice presentations. The original use of the term applied specifically to a variety of symptoms exhibited by human service employees as they began to experience stress related to their work. Unfortunately, burnout has become so extensively used by so many people, it has now become unclear as to what it means. As Maslach (1981b) indicated, not only are experts not in agreement on what burnout is or what to do about it—they also cannot even agree about how to spell it (burnout? burn-out? Burn-out? burn out?). The definition used in the present study was developed through research by Maslach and Jackson (1979a): burnout is a syndrome of emotional exhaustion and cynicism that commonly appears among individuals who do people work of some kind.

Morrow (1981) reported:

> One of the biggest difficulties with the concept of burnout is that it has become faddish and indiscriminant, an item of psycho-babble, the psychic equivalent, in its ubiquitousness, of jogging . . . the term perfectly captures an American habit of hyperbole and narcissism working in tandem: a hypochondria of the spirit. (p. 48)

Not surprisingly, there have become those who question the existence of burnout (Paine, 1981) or how it happens to exist now rather than previously.

Need for the Study

Cherniss (1980b, 1981) and Paine (1981) have focused on the historical development of burnout and how its study has become important today. The foundation for the burnout phenomenon began to be constructed during World War II. Psychiatric casualties as well as psychological research for defense purposes greatly expanded the roles of psychiatry and clinical psychology. In addition, closer ties with Europe exposed individuals to and stimulated interest in the psychological dimensions of life, such as psychoanalysis and existentialism. Based upon these events, the government's interest in human services changed and the foundation for a change in values of the public as a whole was set.

Historical, Political, and Economic Roots. The government's increased emphasis on human services support coincided with a public that was in a hurry to make up for lost time. Having survived two eras of deprivation, the Great Depression and World War II, a move toward self-actualization and self-fulfillment was evident. During the fifties, the government poured funds readily into the training programs and research projects of human services professionals. The professionals were trusted to use the funds as they saw fit.

In the sixties, however, "rights" and interest groups began to focus on how taxpayers' money was being spent. Spearheaded by the Civil Rights Movement and consumers' rights groups, demands were made for greater accountability. With the large number of social interest groups, there were naturally conflicts over economic goals. The result was a dramatic increase in the number of rules, regulations, constraints and external monitoring bodies. Caught in the middle between groups with conflicting demands and with increasing governmental restrictions, administrators tried to adapt by developing ambiguous and

conflicting program goals (Cherniss, 1980b). The outcome was increased role ambiguity and conflict for staff that fostered a fertile environment for burnout.

Concurrently, another political trend had begun to develop. The trend began with great hopes and expectations for social and human service programs. Social reformers and professionals promised dramatic changes. Based on the values of the fifties, the public trusted these promises and valued the opinions of authorities and institutions. However, when the promises and changes were not realized, the attitude began to change to one of criticism and suspiciousness.

Leaders and social institutions were openly questioned. The disillusionment with authority was accelerated through the late sixties and early seventies by impatience with the slow civil rights changes, the assassinations of charismatic leaders such as the Kennedys, Malcolm X, and Martin Luther King, Jr., the Vietnam War, and, finally, the Watergate revelations. Human service professionals, once seen as unquestionable authorities, were no exception in the mass disillusionment. How human service monies were spent, on whom, and how the services were delivered were all open to question.

Questioning was heightened by the economic slowdown during the late sixties. A realization of limited resources acted as an impetus for people to critically examine if services were efficient or even necessary. Federal, state, and community demands for accountability and guidelines produced more paperwork and less autonomy for the human service worker than in previous years. Consumers of services became increasingly critical of the quality of services. The criticism was heightened by the loss of faith that authorities would act in the consumers' best interests. A resultant effect was consumers who were more resistant, less appreciative, and who saw human service providers as potential adversaries. As providers found their work less rewarding and more difficult than in the past, reports of burnout increased. Professionals trained in

the values of the fifties and sixties found themselves unprepared to face the demands of the seventies.

These demands were also increasing drastically in the seventies as a result of the decline of communities including families. Communities once provided support systems such as extended families, churches, and neighborhoods. These supports provided meaning, security, and a sense of belonging through one's life. There was a clearer sense of the rules on which to base decisions and values.

As life became increasingly complex socially, technology and knowledge were greatly expanding. The terms "future shock" and obsolescence began to appear in relation to skills for working and living. As complexity and change increased, the seventies became known as the "age of anxiety." Human services were in greater demand, yet clientele came in with fewer support systems and with less trust in the authority vested in the professional. The result of the combination was increased demands by recipients of services, large caseloads, and greater burnout for human service providers. As the providers struggled to meet increasing demands, their roles became more unclear as bureaucratic demands conflicted with recipient demands. The quality of services was then questioned by recipients and government funders alike.

Quality of Care. Maslach (1979) has pointed to the effect of burnout on the quality of care to recipients and job performance of the provider. Recipients may wait longer for less attention and a lower quality of care from a provider experiencing burnout. Scholom and Perlman (1979) have indicated that the quality of service provided to the consumer of services is directly related to the delivery system's responsiveness to provider needs.

The well-being of clients may then be dependent on the well-being of the service provider (Larson, Gilbertson, & Powell, 1978). Neglecting the service

provider has led to increased absenteeism, turnover, and a negative attitude by the service provider for the recipient. These actions and attitudes affect the continuity, availability, and quality of the service. Both Kamis (1981) and Freudenberger (1980) have suggested that it is the competent, dedicated employee who is most likely to burnout because of his/her additional internal pressures to do well. The question then has become who cares for the caregiver?

Organizational Responsibility. Since burnout affects the well-being of human service employees and the quality of services to clients, researchers have questioned the organizational responsibility to what Scholom and Perlman (1979) term the forgotten staff. Recently, Rice (1981) has pointed to a number of lawsuits filed by employees and their families. The suits have contained requests for a legal opinion regarding the organization's responsibility in creating and allowing excessive job stress leading to emotional, physical, and even fatal consequences.

Colligan, Smith, and Hurrel (1977) found human service employees were experiencing high levels of job stress, and Garfield (1980) reports that six of the ten most stressful professions are in the health care field.

> The very nature of professional helping, which involves balancing the issues of caring and objectivity, attempting to be flexible and spontaneous, listening and reacting to an array of problems, and rendering difficult decisions, continuously places workers in stressful positions that can easily develop into distressful situations. (Spizcuzza & Devoe, 1982, p. 96)

Despite such potentially harmful effects on professionals, Goldenberg (1971) observed that most human service programs are created with an implicit assumption that the needs of staff are of relatively little importance, and Sarason (1977) reported that there exists a commonly held belief that professionals experience positive working conditions. The result has been little concern regarding the working conditions of the human service professional.

Research is needed to provide further links between personal and organizational characteristics leading to debilitating physical, emotional, and behavioral conditions. Court decisions based on the research may well add to the organizational costs of burnout.

Costs of Burnout. The cost of stress and burnout to organizations has been estimated at $17 to $25 billion each year in lost performance, absenteeism, and health benefit payments (McGaffey, 1978). In addition, Minnehan and Paine (1981) has pointed to increased accidents, increased turnover, training and other replacement expenses, and an increased number of workers' compensation cases as products of burnout. Such staggering financial figures, in addition to the psychological costs of burnout, have created an urgent need for empirical investigation and control over the effect of burnout.

Need for Research. Research involving burnout was not published until 1976 (Maslach, 1976). Although articles have been prevalent, few are empirical in nature. In a recent review of the literature, Perlman and Hartman (1982) found that only five of 48 articles contained statistical analysis related to burnout. Most writings on burnout have been primarily anecdotal and prescriptive as opposed to empirical and/or theoretical.

In addition to the small number of empirical publications, Einsiedel and Tully (1981) reported that most investigators of burnout have not drawn on other, longer established literature. For example, few researchers have attempted to integrate the literature on occupational stress with that of burnout (MacNeill, 1981; Sweeney, 1981). A partial explanation has been cited by Paine (1981). He indicated that most occupational stress research has been done in business and industry, whereas burnout investigations need to be conducted in the public sector and human service areas. Also, to date, most burnout research has been

conducted by social or clinical psychologists rather than organizational or counseling psychologists who may be more familiar with the occupational stress literature than social or clinical psychologists.

Besides not integrating research, many authors have not cited research to support their theoretical burnout literature. Freudenberger, who coined the turn burnout, only referenced three research related articles in his entire book on burnout (Freudenberger & Richelson, 1980). Several researchers have used the term burnout in the title of an empirical article, but, in fact, used measures of job satisfaction (Harrison, 1980) or stress (Olson & Matuskey, 1982). No articles have been found that used both measures of burnout and job stress to investigate the relationship between the two constructs. In short, there exists a need to conduct research that integrates the occupational stress literature and investigates the relationship between job stress and burnout in the human services.

Purpose of the Study

There has been an absence of research on burnout with the human service employees (Dehlinger & Perlman, 1978; Sarata, 1974). Research related to job stress and burnout issues in the human services have been consistently avoided almost as if they were taboo (Maslach, 1981b). The purpose of the present study is fivefold:

1. to extend the existing research on burnout and thus add validity to the burnout construct,
2. to link the literature on occupational stress with that of burnout,
3. to investigate the relationship between job stress and burnout measures for the first time,
4. to investigate a model which integrates occupational stress and burnout through a causal analysis, and

5. to propose a working model of burnout for further investigation and expansion of the construct.

Hypotheses

The research hypotheses investigated in the study were as follows.

Hypothesis 1: A positive relationship exists between job stress and frequency of feelings for burnout.

Hypothesis 2: A positive relationship exists between job stress and intensity of feelings for burnout.

Hypothesis 3: The relationship between job stress and frequency of feelings for burnout is stronger than the relationship between job stress and intensity of feelings for burnout.

Hypothesis 4: A stronger relationship exists between job stress and the emotional exhaustion factor of burnout than between job stress and the depersonalization or personal accomplishment factors for frequency of feelings for burnout.

Hypothesis 5: A stronger relationship exists between job stress and the emotional exhaustion factor of burnout than between job stress and the depersonalization or personal accomplishment factors for intensity of feelings for burnout.

Theory

As the research on burnout has been primarily of a descriptive nature, the time has now come to develop the burnout construct from a more explanatory perspective. Several models of burnout have been proposed, but none of these have been empirically investigated (Kamis, 1981; Perlman & Hartman, 1982; Truch, 1980). Shinn (1981) has recommended that investigations use research designs that allow for causal inference, while Kamis (1981) has specifically suggested the use of a path analysis design to better understand the burnout construct.

By putting the focal relationships into multivariate contexts, path analysis allows increased confidence in making causal inference. The model proposed by Perlman and Hartman (1982) in their literature review has the advantage of being

particularly comprehensive. However, the mathematical consequences of increasing the number of variables in a path analysis has created a dilemma. By increasing the number of variables in the model for the purpose of comprehensiveness, the probability of random error and decreased confidence in the model results. For those reasons, Young (1977) has recommended a conservative approach in selecting variables in any model to be investigated.

Proposed Model. With that in mind, a model was developed for the present study which integrated the most common variables from the occupational stress literature with burnout (see Figure 1.1). The variables selected were those of adaptation, role ambiguity, role conflict, role overload, job stress and burnout. Adaptation, as described by Hall (1977) refers to how flexible one is in meeting environmental demands while still being capable of gratifying one's own internal needs. An individual's adaptive capacity relies heavily upon how vulnerable s/he sees her/himself to potentially stressful environmental demands.

The role concepts of ambiguity, conflict, and overload have been extensively investigated with regard to job stress (Kahn, 1974). Role ambiguity has been defined as the lack of role expectations and the degree of uncertainty regarding the outcomes of one's performance and/or evaluation (Carroll & Tosi, 1977; Schuler et al., 1977). Schuler et al. have also defined role conflict as the degree of incongruity of expectations associated with a role. Role overload has been defined as having too much work to do in the time available (Beehr et al., 1976). Each of these role variables has been reported as stressors contributing to job stress, but no research has been published in which role theory has been applied to burnout; only theoretical literature was found to exist which related role theory to mental health employees.

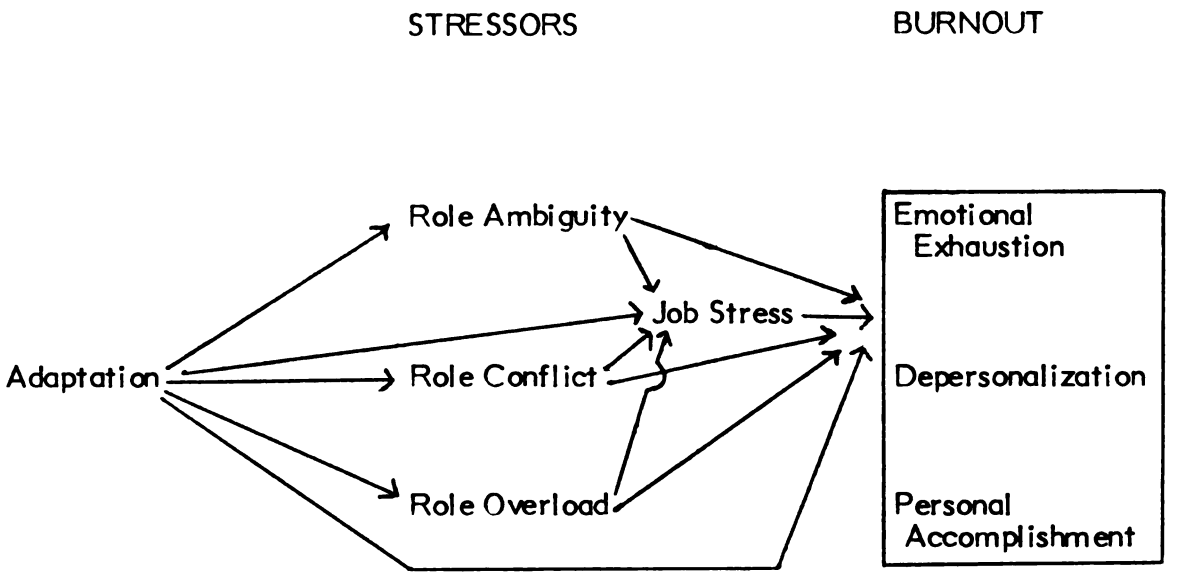

Figure I.I. Relationships among adaptation, stressors, job stress, and burnout.

Job stress has long been an area of study, but, like the role variables, no published research could be found that related job stress to mental health employees or burnout. The definition of job stress in the present study is the reaction or strain produced from work-related stressors. The 1979 Maslach and Jackson burnout definition was selected for the model: burnout is a syndrome of emotional exhaustion and cynicism that commonly appears among individuals who do people work of some kind. The present investigation extended the application of role theory and job stress to both mental health employees and burnout.

Proposed Model Process. The beginning of the model has the assumption that each individual brings his/her own personality characteristics into any potentially stressful situation. Freudenberger (1975) has made references to

personality variables that predisposed one to burnout. His suggested variables, however, remain untested. Pearlin and Schooler (1978) found that the stress experienced has more to do with one's adaptive capacity or psychological resources within the person. Bridger (1979) and Spensley and Blaker (1976) have specifically referred to the potential vulnerability of human service employees to stressors. How a human services provider perceives potential role stressors such as ambiguity, conflict, and overload has been reported to be contingent upon how vulnerable s/he felt in such a context (Levinson, 1976).

Any given provider's response also varies on how much actual demand is made in the environment. The actual demand is filtered through the individual's perception with the result being the amount of job stress experienced. Given that stress is experienced, the amount experienced will be moderated by the person's adaptive capacity again. A final result in the proposed model was based on both theoretical and empirical underpinnings. The empirical base upon which the model was based is summarized in Chapter II, Review of the Literature.

To summarize, the model investigated included one's adaptive capacity as the pre-existing psychological resources that an individual has brought into the work environment. Within the environment existed the potential role stressors of ambiguity, conflict, and overload. The degree to which the adaptive capacity has prepared one to adjust to the potential stressors determined one's perceived job stress. How much job stress one has experienced then has the most direct impact upon one's experienced burnout.

Overview of the Study

The presentation of the investigation has been expressed as follows. In Chapter II, literature has been reviewed relating to burnout and other variables within the model. The literature has been summarized as it relates to the

construction of the model investigated. Within Chapter III, the sample has been described along with the operational instruments used as variables in the study. A discussion of the design has been included as it applied to the testable hypotheses and analysis. A presentation of the results from the main hypotheses along with a subsidiary analysis has been provided in Chapter IV. A summary, discussion, and recommendations for future research have been presented in Chapter V.

CHAPTER II

REVIEW OF THE LITERATURE

Burnout has become a widely used and misunderstood term since it first appeared in print just over 10 years ago. Although articles on burnout have been published in an almost geometric progression, the trend has been to expand the application of burnout to more occupations and to expand its meaning rather than to develop the construct through research. The trend over the past three years have been to publish more books than research. In fact, there were at least 13 books published (Cherniss, 1980a, 1980b; Edelwich & Brodsky, 1980; Freudenberger & Richelson, 1980; Lauderdale, 1982; Maslach, 1982; Messina, 1982; Pines, Aronson, & Kafry, 1981; Potter, 1980; Truch, 1980; Vash, 1980; Veninga & Spradley, 1981; Welch & Tate, 1982) compared to only 12 published research journal articles that were found (Cummings & Nall, 1983; Iwanicki & Schwab, 1981; Jackson & Maslach, 1981b; Jones, 1981a; Lewiston, Conley, & Blessing-Moore, in press; Maslach, 1976; Maslach & Jackson, 1979b; Maslach & Jackson, 1981; Pines & Maslach, 1978; Soto & Jones, 1982; Stout & Williams, 1983; Thompson, 1980). A clarification of the burnout construct has become necessary due to the confusion generated by its misuse and popularity.

The review of literature has been organized in the following manner. First, the definition of burnout is clarified and operationalized as it applies to the present study. Next, the theoretical stages of burnout are discussed and related to a research-based theory in social psychology. Third, research related to burnout in the areas of job satisfaction and alienation are briefly reviewed. Following the related research, the area of adaptation as it has been applied to

stress is related to burnout. Research in the areas of role stressors and job stress is integrated within the burnout framework. The integration is followed by a review of the theory and research on burnout including a discussion of the symptoms of and contributors to burnout based upon theoretical and prescriptive literature. A summary is provided that gives an overview of the burnout research as it applies to the model investigated in the present study.

Definition of Burnout

One barrier to the study of burnout has been the lack of a clear definition of the term. Since Freudenberger (1974) first defined burnout, the lack of empirical attempts to operationalize a clear definition has been disappointing and has prevented the term from approaching the status in psychology of such related terms as job stress, alienation, and job satisfaction. Freudenberger (1974, 1975, 1977) has been consistent in his definition. He has used a dictionary definition which is for the verb "burn-out." Burn-out is defined as "to fail, wear out, or become exhausted by making excessive demands on energy, strength, or resources." The definition is clear enough, except that Freudenberger has never developed an empirical measure of burnout. He has described the burnout experience as a subjective experience. His acute observations of those he perceives as experiencing burnout have added much to the identification of the burnout phenomena. However, he has not published research to extend the term to a measurable construct. In addition, Freudenberger's articles have not appeared in widely circulated journals.

The confusion concerning what burnout actually means has been widely recognized (Chance, 1981; Einsiedel & Tully, 1981; Jones, 1981; Maslach, 1981; Welch, Medeiros & Tate, 1982). Maslach (1981b) has listed 16 different definitions and concluded that most people really do not know what they are discussing when

they refer to burnout. Maslach and her associates have made more strides than other researchers in defining burnout. Beginning with the first research on burnout in 1976, Maslach began to develop a questionnaire to operationalize the term. The questionnaire was first published by Maslach and Jackson in 1979.

Named the Maslach Burnout Inventory (MBI), the operational definition became "a syndrome of physical and emotional exhaustion, involving the development of a negative self-concept, negative job attitudes, and loss of concern and feeling for clients." Using factor analysis on the items, the definition was divided into three subscales: emotional exhaustion, personal accomplishment, and depersonalization. The results of Maslach's research were used to provide the operational definition for the present study.

The use of the definition is also supported by the extensive literature review of Perlman and Hartman (1982). They concluded that three components needed to be included in the burnout definition: "a) emotional and/or physical exhaustion, b) lowered job productivity, and c) over-depersonalization" (p. 293). Maslach (1981b) also found the definition consistent with the theoretical, anecdotal, and research literature.

In addition to the literature reviews, the questionnaire and definition have been examined empircally in several studies. Walker, Kelly, & O'Shinsky (1981) concluded that the MBI was a valid instrument for assessing burnout. Maslach and Jackson (1981b) reported that the definition and instrument held up under extensive research. They reported both reliability and validity scores in a description of the instrument's development. Furthermore, a cross validation study by Iwanicki and Schwab (1981) also yielded the same variables, lending even more credence to the use of MBI as a reliable and valid instrument used in the present research.

Stages of Burnout

A partial explanation for the definitional variations lies in the proposed stages of burnout. Human service workers have reported differing symptoms as well as differing subjective psychological experiences based upon the time frame in the burnout process. Although no longitudinal studies have been conducted to validate the theory of burnout stages, several theoretical models as well as some related research exist.

Cherniss (1980b) hypothesizes a three stage model of burnout. Under a stress-strain-burnout continuum framework, the first proposed stage begins within six months and is identified as an imbalance (stress) between resources and demands. He points out that one reason difficult clients potentiate burnout is that a client's cooperation and motivations are necessary resources for meeting the demands of a helping relationship. Such an imbalance between resources and demand initiate stress and potential strain for the professional.

The second stage is the immediate emotional response to the imbalance. The usually short-term response often involves feelings of tension, anxiety, emotional fatigue, and exhaustion (strain). A final stage involves the changes of attitude and behavior as a means of coping with the strain. Such changes are frequently observed as a detachment of the individual from clients as well as a general cynicism toward work and non-work activities.

In other models, the burnout process begins prior to the experience of stress. Both Edelwich and Brodsky (1980) and Veninga and Spradley (1981) suggest that the first stage is actually one of high enthusiasm. Within the enthusiasm or honeymoon phase, the individual experiences high energy, exhileration, and unrealistic expectations. These experiences form the foundation for the early phases of deterioration. After the enthusiastic stage, the two models become different.

Veninga and Spradley (1981) refer to the second stage as "fuel shortage." During the stage, professionals begin to experience a vague sense of loss, fatigue, and job dissatisfaction, as well as a desire to escape the situation. Next, they propose that the existing symptoms become worse, thus leading to chronic exhaustion, physical illness, and emotional reactions of anger and depression. A crisis stage then becomes apparent in which the individual becomes obsessed with failure. Pessimism and self-doubt permeate the individual's thinking while an intense desire to escape at any cost exists. The authors refer to the final burnout stage as "hitting the wall." At that stage, the individual's feelings are so intertwined with the physical, mental, and behavioral problems that burnout has become a lifestyle.

Differing from the stages of Veninga and Spradley, Edelwich and Brodsky (1980) term the second stage as one of stagnation. At that time, the individual notices that the enthusiasm is gone and a new awareness of the inadequacy of the job to meet personal needs exists. The beginning of escape desires now become evident.

Stagnation is followed by the stage of frustration. Limitations of the job are no longer viewed as restrictions, but as direct threats to one's well-being. The individual begins to experience a feeling of defeat. It is common here for the person to work additional hours in an effort to fight back. However, the additional work tends to only add to the existing physical and emotional exhaustion.

Frustrated and feeling defeated, the individual enters a stage of apathy as a defense against the emotional pain. The effort here is one of avoidance while simply trying to maintain job requirements. Changes and challenges are viewed as threats and are frequently responded to in a rigidly cynical, detached, emotional manner.

Burnout Stage-Related Research

Although the empirical support was not based on research directly related to burnout, an integration of the social psychological theories of reactance and learned helplessness does lend support. Reactance and learned helplessness theories are applicable at different stages of burnout. The stages of enthusiasm and frustration are best supported by reactance theory. Individuals entering the helping field are frequently energetic and have high expectations of being able to "make a difference" in the helping relationships. They fully expect to be in control on their job. The job often is the end point of considerable educational, financial, and time investment. Thus, it is of high personal importance to the individual.

The importance of one's work in conjunction with an expectation for control set the stage for reactance theory. From reactance theory, the prediction is that one will be motivated by perceived loss of control in direct proportion to the expectation of control and the importance placed on the task. As professionals begin to realize their limitations and inadequacies to help others, particularly difficult clients, they begin to experience the initial sense of control loss. At that point, the stagnation stage begins.

The stagnation stage varies in length according to how quickly the individual discovers the extent of control loss, the importance of the job, and how completely the individual sees the helping relationship outcome is not contingent on the effort and/or techniques used. If the job is seen as very important, the professional may attempt to ignore the extent to which the job does not meet personal needs and disregard the new feelings of inadequacy. However, when continually faced with feedback that controls and helping relationships have limited compatibility, the individual begins to move into the frustration stage.

During the frustration stage, the individual reacts with increased energy to the perceived loss of control. Working extra hours, attempting to exert additional control, becoming authoritarian, reducing contact with others, and becoming increasingly rigid are all adaptive attempts to regain a perception of control. Within reactance theory, one would expect the individual to struggle for control longer if control were strongly expected in the beginning. Freudenberger (1975) has also indicated that the more involved, dedicated workers ignore the realities of the helping relationship longer than workers who have less invested in their jobs. The first three stages of the Edelwich-Brodsky model are then quite consistent with the research results of the reactance theory.

Starting with the fourth stage, apathy, the reactance theory becomes less applicable and gives way to the learned helplessness theory as proposed by Seligman (1974, 1975). From the learned helplessness theory, the prediction is that an individual exposed continually to uncontrollable outcomes will become passive and depressed. The reaction of passivity and depression are dependent on the individual's giving up on the idea of controlling the outcome. The individual's feeling of helplessness over the relationship often leads to further isolation and a detached relationship with clients. The lack of involvement in work is likely to reduce the individual's efficiency even further, thus leading to even greater feelings of incompetence than in earlier stages.

The degree to which an individual recovers from these feelings of incompetence is likely to be dependent upon why the situation is seen as uncontrollable. According to Wortman and Brehm (1975):

> We might speculate that a subject's level of stress will be related to the attribution of causality that he makes about his failure to exert control. A person who gives up while still believing that control is possible but that his inadequacies prevent him from mastering the situation may experience considerably more stress than a person who gives up because he has come to view the outcome as uncontrollable. (p. 329)

The resultant stress reaction to not being able to accept the limits of control in a helping relationship leads to symptoms of burnout that readily coincide with the integrated model based upon the reactance and learned helplessness theories. Despite such support, the dearth of research on the burnout construct has necessitated the building of a foundation for burnout based upon other constructs. The most commonly discussed related areas are those of job satisfaction and alienation. Job satisfaction and alienation have both been adequately researched, and a brief review is contained in the following section.

Burnout-Related Research

The most striking feature in reviewing the job satisfaction and alienation literature is the absence of research with human services personnel. Sarata (1974) noted that fewer than 20 empirical studies of job satisfaction within the human services field had been published and most of these were within the nursing profession. Only six studies dealing with job satisfaction of community mental health employees were found by Dehlinger and Pearlman (1978). All but one of the six were published in 1976 or later. With regard to alienation, Katz and Kahn (1978) report that almost no information on human services exists. It is sad that by the time the human services researchers have decided to look at the quality of work life of the service providers, many of the service providers are no longer working due to turnover or budget cuts that have eliminated their jobs. However, some parallels have been drawn between job satisfaction and burnout.

Job Satisfaction. Locke (1976) defines job satisfaction as " . . . a pleasurable or positive state resulting from the appraisal of one's job or job experiences" (p. 1300). The comparison of burnout and job satisfaction is one between burnout and dissatisfaction or lack of satisfaction. Burnout and job dissatisfaction have been correlated with some of the same behaviors or self-

reports. Subjects reported physical symptoms of nausea and loss of appetite (Herzberg et al., 1957). Burke (1969/1970) discovered relationships between fatigue, shortness of breath, and headaches and job dissatisfaction. Consistent relationships have been found between job dissatisfaction and absenteeism and turnover in most major job satisfaction literature reviews (Brayfield & Crockett, 1955; Herzberg et al., 1957; Vroom, 1964; Porter & Steers, 1973).

Herzberg et al. (1957) and Salch and Otis (1964) suggested a relationship between job dissatisfaction and age. They identified a trend with young people who had just begun employment. Job dissatisfaction was low as new employees, but increased sharply within a few years. It then began to fall as the employees continued on the job.

There was a similarity between the job dissatisfaction trend and the trend of burnout as described by Cherniss et al. (1979) in his mystique of public workers. Cherniss reported that young public workers began their jobs with high energy and great expectations. Within a year or two, they began to experience burnout as evidenced by emotional exhaustion and little sense of accomplishment.

In a study of role strain and burnout in child-protective workers, Harrison (1980) examined the relationship between the role characteristics of conflict and ambiguity and burnout. On examination of the burnout measure, it was found that Harrison actually used a job satisfaction index. He determined that there was an inverse relationship between role conflict and ambiguity with satisfaction with work itself, supervision, co-workers, and overall job satisfaction.

The one study to compare job dissatisfaction and burnout is that of Armstrong (1977). Studying 162 workers in child abuse projects, she reported a Pearson correlation between job satisfaction and burnout of -.58, but contended that burnout tends to be more related to work process or factors that facilitate

getting the job done, whereas job satisfaction is associated with the affective, supportive dimensions of a job. In support of her contention, she pointed out differences between variables with job satisfaction and with burnout.

Differences in worker characteristics were first noted. Characteristics more highly associated with work were those of being one of the younger employees on a job, working full time, and being supervised. Wide spans of control and centralization of decision making at the program level were more highly associated with high burnout than with high job dissatisfaction. Job dissatisfaction was more closely related to organizational complexity than was burnout. Armstrong (1977) also found that poor peer cohesion and inadequate staff support was more likely to be related to job dissatisfaction than to burnout. Conversely, burnout was more likely to be connected to inadequate communication, lack of clarity about rules and regulations, limited opportunities for innovative behavior on the job, and lack of structure and support provided by project leaders.

Some limitations were observed in the Armstrong study. The burnout inventory developed for the study has not been reported in subsequent research. Although the validity of the job satisfaction measure, The Job Description Index, has been well established (Smith, Kendall, & Hulin, 1969), there are no indications that the burnout inventory measured the same construct as that of the frequently used Maslach Burnout Inventory. Until the burnout measure used by Armstrong has further validity studies, the job dissatisfaction and burnout comparison needs to be interpreted with caution.

A concept that is similar to job dissatisfaction is alienation. In fact, Warr and Wall (1975) refer to alienation as job dissatisfaction-minus. Alienation refers to the condition when one experiences the feeling of being separated from

someone or something (Schacht, 1970). An individual could also be said to experience burnout when the person feels alienated from the purpose of work.

Alienation. The study of alienation has frequently been conducted within industrial organizations and with the subjects holding production-oriented jobs. Within the human services field, the product of one's work is more ambiguous than in industry. Whether the product is the employee's service, clients' subjective rating, or a selected measure of change may frequently change between and within human service organizations. The human service employee may begin to feel alienated from the purpose of a job because the actual purpose never becomes clear. Although the product varies between industrial and human service organizations, the feelings of the workers may be quite similar.

Katz and Kahn (1978) report that little information exists with regard to alienation in the human services. However, some information does exist for non-human service employees. Workers in highly formalized organizations consistently reported alienation from their work (Crozier, 1964; Hage & Aiken, 1966; Hall, 1968; Miller, 1967; Olmstead, 1973; Thompson, 1961). Hage and Aiken (1962, 1968) state that alienation is also frequently reported in organizations when workers have little decision making authority. Other reported associations with alienation are inadequate communication, lack of peer cohesion, lack of positive feedback and support, low job autonomy, over-specialized jobs, lack of clarity of agency goals and procedures, and limited opportunities for promotion and self-improvement (Maslach, 1976; Olmstead, 1973; Pearlin, 1962; Smith & King, 1975; Ullman et al., 1966).

The most comprehensive study of alienation was conducted by Kohn and Schooler (1983). In their 10 year longitudinal study, they questioned a national stratified sample of 3101 men who were 16 years and older regarding their

organizations as well as their attitudes. In reviewing the literature, the authors discovered five types of alienation: powerlessness, self-estrangement, normlessness, cultural estrangement, and meaninglessness. Of the different types, only the first two appear to be consistent with the definition of burnout.

Seeman (1972) refers to powerlessness as the expectancy held by an individual that the occurrence of outcomes cannot be determined by his/her behavior. The definition of the term is meant to reflect a sense of being powerless rather than actual control over an outcome. Self-estrangement is described as an inability to find activities that are self-rewarding or engaging (Seeman, 1972). Such terms as purposeless and all-encompassed boredom further describe self-estrangement.

A relationship was discovered with the two types of alienation to both control over the process of one's work (closeness of supervision, routinization, and substantive complexity of work) and control over the product of one's labor (ownership and hierarchical position) (see Table 2.1). Individuals are more likely to feel powerless and self-estranged when they have fewer people working under them and within non-bureaucratic organizations than when they have a greater number of people working under them and work in a highly bureaucratic organization. In addition, work conditions that facilitate or hamper the actions of self-direction relate meaningfully to feelings of powerlessness and self-estrangement. The authors, however, suggest that the mediating factors of one's adaptive capacity to the work conditions may also have an influence.

Table 2.1

Correlates of Powerlessness and Self-Estrangement

Correlate	Powerlessness	Self-Estrangement
Position in the supervisory hierarchy	-.13**	-.09**
Bureaucratization of firm or organization	-.09**	-.09**
Occupational self-direction: closeness of supervision	.16**	.14**
Routinization of work	.08**	.04*
Substance complexity of job	-.19**	-.17**

* ($p < .05$)
** ($p < .01$)

Adapted from Kohn and Schooler, 1983.

Adaptation and Burnout

In the present study, one's adaptive capacity was investigated through a measure of adaptation. Adaptation is particularly important since it is the individual's adaptive capacity that is brought into any potentially stressful situation. Despite reporting that burnout can best be understood by examining the social and situational sources of job-related stressors, Maslach (1981) reported that "What varies is the tolerance of the helping professional for this continual stress, a tolerance which gradually wears away under the never-ending onslaught of emotional tension" (p. 42). McLean (1979) supports the concept of one's tolerance indicating that one's perceived vulnerability is of primary importance in adapting to experience stress.

Hall (1977), whose definition was used in the present study, points out that adaptation has two primary components in its definition. The first relates to how flexible the individual is in meeting environmental demands and thus has an external focus. A second component refers to one's being capable of gratifying internal needs. The two components provide the individual with the adaptive capacity or psychological resources to enter the job environment. While much has been written concerning the individual's adaptive capacity, most of the current literature is theoretical.

Adaptation Theory. From an external viewpoint, flexibility in meeting environmental demands is frequently emphasized. White (1974) proposes that adaptation is a striving toward an acceptable compromise rather than searching for total environmental control or having total resignation to any demands. Factors such as disconfirmed expectation, blocked goal responses, loss of control over the outcomes of one's actions, and information deficiency or overload can all inhibit one's flexibility.

The same factors that can inhibit flexibility may also increase one's physical and emotional arousal. Schachter and Singer (1962) proposed a theory of emotion that is consistent with external factors affecting one's adaptation. They suggest that when an individual is aroused and cannot readily identify the source of the arousal, s/he will tend to search the environment for an explanation of what caused the arousal. If the search yields a plausible cause, feeling will be interpreted in terms of the perceived cause.

They also indicate that the arousal will only be created under ambiguous conditions. Such conditions tend to increase the chances of incorrect identification of a cause. Schachter and Singer's theory is supported by the work on loss of control over outcome (Averill, 1973), blocked goal responses or

disconfirmed expectations (Mandler, 1975), and information overload (Milgram, 1970). It is not surprising that human service employees experiencing ambiguity and stress begin to search for a plausible cause for their emotions. The ever-present client can easily be identified as the cause of the unpleasant emotion.

White (1974) further adds to the proposal that too little or too much information may lead to maladaptive behavior. He indicates that the cognitive field must keep securing an adequate amount of information to act as a guide to adaptive action. The right amount of information then decreases ambiguity which increases one's flexibility to meet environmental demands.

Warnath and Shelton (1976) and Collins (1977) discuss maladaptation of professional helpers leading to burnout in terms of disconfirmed expectations. Graduate students are frequently given unrealistic expectation regarding the effectiveness of their techniques and the appreciation that will be expressed by their clients (Warnath & Shelton, 1976). Collins (1977) reports that texts and case studies tend to make counseling look easy and always successful. Professional helpers may frequently experience ambiguity, arousal, and stress due to incorrect information being given which sets up unrealistic expectations followed by maladaptive behavior.

As important as meeting the external demands is the issue of gratifying one's internal needs. Larson, Gilbertson, and Powell (1978) have noted that psychotherapists who use maladaptive behavior and thus experience burnout tend to ignore advice to their clients related to paying attention to internal needs. In observing behavior in the chronically ill, Turk (1979) reported that the better adjusting patients were more actively involved in and optimistic about their lives than the less adequately adjusting patients who tended to be isolated, withdrawn, and pessimistic. Throughout the burnout literature emphasis has been placed on the professional helpers' maladaptive responses to their environment and to

meeting their own needs. Although the maladaptive responses have been described in various ways, each of these descriptions has fit the adaptation definition of Hall (1977); that is, the professional helpers lacked the flexibility to the environmental demands to satisfy their own internal needs.

Adaptation-Related Research

In developing his adaptation scale, Survey of Actualization: Adaptation (SAA), Hall (1977) conducted an extensive search of the adaptation research. He noted that there was an absence of valid instrumentation to measure adaptation and a lack of consistency between adaptation definition used in research. The void of an adequate instrument was part of Hall's impetus in developing his own research instrument. A search of the literature for the present study yielded only the SAA as an existing instrument for a measure of adaptation. However, a few descriptive studies were found that are consistent with an adaptation measure being used.

In research by Pearlin and Schooler (1978), interviews were conducted with 2300 individuals regarding their adaptive response to potentially stressful events. They interpreted their findings as suggesting that the experience of stress hinges much more closely on psychological resources than on specific behavioral responses. Thus, one's assessment of existing psychological resources for combating situational demands is based upon the person's cognitive appraisal of the transaction. That is, experienced stress is highly dependent upon how the person both views him/herself and how the person perceives the potentially stressful situation. McGrath (1976) discusses the use of the cognitive appraisal as leading to perceptual styles and, finally, response selection. The combination of perception and selection define how vulnerable an individual will be and, consequently, the person's adaptation to life demands.

Particular life demands are predictable within given situations. Such a situation would tend to have a high predisposition for a selected emotional response when the person entered the condition. An example is the research of Bugen (1979) through interviewing caregivers of the terminally ill. He interpreted the results as a demonstration that emotional states directly affect perceptions, which then affect caregiver behavior. The results are consistent with the most anxious caregivers relating to the terminally ill in a more negative light then low-anxious caregivers. There was a tendency for the most anxious caregivers to rate a dying person as (a) more denying, (b) more angry, (c) less accepting, and (d) less helpful than the low anxious caregiver.

Bugen's results are consistent with the suggestions of Lazarus and Launier (1978) who report that an individual's sense of vulnerability and susceptibility to stress are increased by a belief that when a setting is hostile or dangerous, the person feels inadequate with regard to adapting to the situation. They also note:

> One of the most interesting and obscure issues in the field of stress coping, health, and illness concerns the distinction between threat and challenge. The difference seems to be a matter of positive versus negative tone; that is, whether one emphasizes in the appraisal the potential harm in the transaction (threat) or the difficult-to-attain, possibly risky, but positive mastery of gain (challenge). (p. 304)

The concept of psychological hardiness, which is related to adaptation, has been reported in two studies. Psychological hardiness refers to the tendency of an individual to exhibit few symptoms of stress despite exposure to events that tend to be stressors. In a study by Kobasa (1979), 161 middle- and upper-level executives were divided into two groups based on how often they reported being ill. The executives had been matched as having had comparatively high degrees of stressful life events as measured by the Holmes and Rahe Schedule of Recent Life Events (1967). Discriminant function analysis was run on half the subjects in each group and cross validated on the remaining subjects. The results supported

the prediction that high stress/low illness executives show, by comparison to high stress/high illness executives, more hardiness. That is, as opposed to the high stress/high illness group, they showed (a) a stronger commitment to self (a clearer sense of values, goals, capabilities, and a belief in their importance) rather than alienation from self, (b) a tendency toward an active involvement in the environment (vigorous versus vegetative), (c) an unshakable sense of meaningfulness and ability to evaluate the impact of events in terms of their general life plan with its established priorities (meaningfulness versus nihilism), and (d) the tendency to interpret events in terms of what the person does control (internal control versus external control). Although Pines (1980) reports no information on her samples, other than being from a general population or analysis, her findings were highly consistent with those of Kobasa (1979). These two studies of psychological hardiness are the closest to adaptation research.

Adaptation Research

In reviewing the psychological hardiness and adaptation research, it is important to note that both sets of research involved measures of self-report. Although self-report studies suffer from the problem of subjective distortion of what "really" exists, Mechanic (1974) points to an important factor in one's adapting to environmental stressors.

> This brings us to consideration of a serious misconception that appears to run throughout the stress literature--the notion that successful adaptation requires an accurate perception of reality. There is perhaps no thought so stifling as to see ourselves in proper perspective. We all maintain our self-respect and energy for action through perceptions that enhance our self-importance and self-esteem, and we maintain our sanity by suppressing tremendous vulnerability we all experience in relation to the risks of the real world (Wolfenstein, 1957) . . . . Reality, of course, is a social construction, and to the extent that perspectives are shared and socially reinforced they may facilitate adoption irrespective of their objective truth. It is well known that if men define situations as real, they are real in the consequences. (pp. 37-38)

With the above consideration, the development of a self-report instrument by Hall (1977) to measure adaptation is acceptable.

In Hall's Survey of Actualization Adaptation (SAA), an item pool was selected from the Omnibus Personality Inventory, Minnesota Multiphasic Personality Inventory, California Personality Inventory, and items developed from the research results of Health, Golden, Grinder, Silber, and Offer in their empirical studies of normality (Hall, 1977). Hall's objectives were to study the adaptive functioning construct, validate the SAA, and determine the various levels of functioning of individuals as measured by the SAA. Using samples of resident advisors, randomly selected college students, and high functioning (nominated as emotionally stable and self-actualizing by six psychologists) subjects, Hall reduced the item number from 205 to 85 by means of an item analysis to identify items that discriminated between high and low scores on each item. A procedure with two through seven rotations of factor analysis further reduced the item number to 69 items which fit well with White's three dimensional theory of adaptive functioning.

White (1974) proposed that adaptation had three primary components: information, internal organization, and autonomy. Information emphasizes an individual's cognitive ability to obtain both accurate and the right amount of information to adapt. The second component, internal organization, refers to one's capacity to control and maintain satisfactory internal anxiety responses. Adaptation also depends upon a person's flexibility of movement in processing environmental information and consistency in adjusting one's responses to match existing self-perception. He referred to the flexibility as autonomy.

In examining the three components--alpha reliability, estimates, and intercorrelations--Hall concluded that the components were too highly interrelated to be separate scales. He determined that the SAA would best be

used as one large scale of adaptation that had three subsets. The proposal was then for future research to be conducted with adaptation as a unidimensional construct.

The SAA, although the only validated adaptation scale, suffers from several problems that limit its interpretation. Despite the adequate subject number in the resident advisor (102) and randomly selected subjects (120), the return rate of questionnaires was only 42% and 32%, respectively. The return rate compares to almost 97% by the cross-validation sample of nominated high functioning subjects. Subjects in the cross-validation sample totaled only 29 which is quite small for a sample group in a non-controlled study. In addition, the subject pool was restricted almost totally to individuals in their early twenties. Generalization of Hall's (1977) results have to be restricted and undertaken with caution. Nonetheless, Hall has provided a starting point for interpreting the impact of adaptation upon perceived stressors.

Role Stressors and Job Stress. One's adaptive capacity is likely to alter one's subjective experience of potentially stressful situations. In fact, these stressors may be seen more as a challenge than a stressor. The most commonly referred to stressors related to job stress involve the role theory concepts of role ambiguity, role conflict, and role overload. Although very little research has been reported linking role stressors or job stress to burnout, there are some theoretical reports of linkages potentially existing.

In papers presented at a symposium on burnout, Shinn (1979) and Perlman and Hartman (1979) independently hypothesized that role ambiguity, role conflict, and role overload are primary contributors to the job stress leading to burnout. Vash (1980) reported observing chronic role conflict and overload in mental health and public service administrators. She pointed out that recipients,

unions, and mental health boards, as well as state and federal administrations, make demands which are incompatible and create impossible situations leading to burnout. Research on role stressors and their relationship to job stress are in the following sections.

Role Ambiguity

Role ambiguity is conceptualized as the lack of clarity of role expectations and the degree of uncertainty regarding the outcomes of one's role performance (Schuler et al., 1977). Carroll and Tosi (1977) have also included the uncertainty about how one will be evaluated within the definition. In discussing stress within organizations, McGrath (1976) has emphasized the importance of studying role ambiguity in his statement ". . . other things being equal, the more uncertain the relationship between effectiveness of performance on the task (quality, quantity, or speed) and outcome of that performance (desired change in situation), the more stressful the situation" (p. 1376).

There is ample support within the literature for McGrath's emphasis. Role ambiguity has been positively correlated with anxiety (House & Rizzo, 1972; Wispe & Thayer, 1957). Caplan and Jones (1975) found role ambiguity to be positively associated with anxiety, resentment, and depression. Reported positive relationships for role ambiguity with anxiety-stress, role-related tension, and a propensity to leave were reported by Schuler et al. (1977). They also identified a negative relationship between role ambiguity and job satisfaction. Rizzo et al. (1970) indicated similar results in stating that there were positive correlations of role ambiguity with low job satisfaction, high anxiety, and a reported propensity to leave the organization.

The results are consistent with the first major study of role-related stressors in 1964 by Kahn et al. They found that individuals reporting high role

ambiguity also reported experiencing high job-related tension, lower job satisfaction, a stronger sense of futility, less trust in their colleagues, and a lowered self-confidence. A more recent study by Beehr et al. (1976) relates closely to the futility, lack of trust, and low self-confidence. The reported results were that role ambiguity is negatively correlated with involvement and effort toward quality. From these results, it is suggested that role ambiguity is incompatible with the involvement and quality that a human services worker might desire. The incompatibility may lead to disillusionment and ultimately stress at work.

Role clarity, the inverse of role ambiguity, has been reported as being positively related to job satisfaction and inversely associated with job-related tension (Lyons, 1971; Miles & Petty, 1975; Paul, 1974). Lyons and Paul also indicated that role clarity was negatively related to a propensity to leave the organization. Mattingly (1977) stated that although some clarity was needed for child care workers, some ambiguity was also needed for flexibility. However, such ambiguity may have negative effects if it is in the areas of job description and role expectations.

Demographic characteristics of 137 managers and managerial trainees who were divided into groups of high, middle, and low role ambiguity scorers were reported by Burke and Belcourt (1974). As compared to the low ambiguity group, the high ambiguity group was represented by more trainees, women, minorities, better educated, less job tenured, less organizationally tenured, lower income, and a disproportionate number in the middle-aged group (25-44) with fewer in the older group (45 and above). Many of these characteristics would make for uncertainty and lack of clarity on the job. It is suggested that women and minorities may have fewer role models to follow which may cause some uncertainty as to their expectations. Trainees often are new to a position as

indicated by the less tenure on the job characteristic. Being new to an organization with a lower income despite being better educated also would not seem to add to one's security.

In the only study of service workers with role ambiguity, Stout and Posner (1984) studied the relationship among stress, role ambiguity, role conflict, and job satisfaction. The subjects were 138 direct service workers in mental health, mental retardation, and physical restoration facilities. Positive correlations were reported for role ambiguity with stress and role conflict while a negative correlation was reported between job satisfaction and role ambiguity. Using partial correlations, they also demonstrated that role ambiguity is more strongly associated with stress than role conflict. They concluded that possibly role conflict was not as powerful a contributor to stress as in previously reported research.

Role Conflict

Role conflict has, in fact, been reported as strongly and consistently associated with stress. Defined as the degree of incongruity of expectations associated with a role (Schuler et al., 1977), role conflict appears to be inherent in those providing services to others. Warnath (1979) pointed to the discrepancies between the role of counselors as described in training programs and the actual work provided within service organizations. He contended that the role expectation the counselor obtains, based in training, is that the service provided is rendered free of financial, time, and organizational constraints. With such assumptions, role conflict becomes inevitable within bureaucratic organizations.

Cherniss, Egnatious, and Wacker (1976) have reiterated the predictable nature of role conflict within service providers in bureaucratic organizations and even suggested that there is a fundamental incompatibility between the public

service professionals' tasks and the organizational structure. In his book on staff burnout, Cherniss (1980b) pointed out:

> The professional service ideal emphasizes the uniqueness of the individual, sensitivity to the special needs of each client, flexibility, individual initiative and resourcefulness and the goal of personal growth and development. On the other hand, the bureaucratic mode of the organization emphasizes orderliness, standardization, uniformity, efficiency, public accountability, and impersonality. Given the discrepancy in these orientations, the potential for high person-role conflict in employees of bureaucratic organizations is high. (p. 85)

Even in non-bureaucratic organizations such as those that provide childcare, the caregiver has to decide between administrative priorities or the needs of the children (Reed, 1977). The result may well be stress resulting from being caught between the role of an employee and the role of a caregiver.

It is not surprising then that Schuler et al. (1977) reported a positive relationship for role conflict with anxiety-stress and role-related tension as well as a negative relationship between role conflict and job satisfaction. They also found, along with Rizzo et al. (1970) that there was a positive association between role conflict and a propensity to leave an organization. Additionally, Rizzo reported a positive correlation for role conflict with low job satisfaction and anxiety.

Although Miles and Perreault (1976) described job-related tension as a consequence of role conflict, Stout and Posner (1984) reported some reservations in discussing the causative nature of role conflict. In their study of 138 direct service workers, they reported a positive relationship between role conflict and stress. However, they added that when role ambiguity is partialed, a significant correlation between stress and role conflict does not exist. In their discussion, Stout and Posner suggested that role conflict may be more specific or amenable to problem-solving than role ambiguity.

Kahn et al. (1964) does not agree and points to a wide range of associations with role conflict. In their national stratified study, Kahn and associates indicated that individuals reporting higher role conflict than others in the study tended to have strong feelings of job-related tension, lower job satisfaction, less confidence in management, attributed power to others, experienced social withdrawal through limiting interpersonal communication, and had less trust, respect, and liking for their colleagues. Their results appeared to be far from specific, and the wide array of relationships seems to require a far greater understanding of the antecedents and consequences than problem-solving would suggest. In fact, an understanding of closely related constructs such as role overload would be helpful.

Role Overload

Mattingly (1977) has suggested that the role conflict of being a care provider and a custodial manager tends to create dual demands which relate closely to role overload. Consistent with the definition of Beehr et al. (1976), role overload being defined as having too much work to do in the time available, she contended that demands by clients added to case manager duties cause overstimulation due to excessive demands. Ultimately, such overestimation leads to job stress and eventually to burnout.

Although role overload may be stressful, Atkinson (1964) stated that if role overload is seen as a challenge, it may, in fact, increase motivation as challenge tends to increase intrinsic rewards gained from successful performance. Increased motivation is consistent with the workers' initial reaction to the burnout experience. The worker begins to put in more hours, but the rate of success may continue to be quite low so that little intrinsic success and satisfaction are experienced.

Beehr et al. (1976) reported results that concur with the proposition by Atkinson. They found a positive correlation of role overload with involvement and effort toward quantity of work. Additional results, although not significant, do bear comment in light of the findings by Cherniss (1980b). Beehr and his associates reported a negative, non-significant relationship between role overload and effort toward quality of work. Cherniss stated that good quality relationships are anticipated by new human service workers, but these may be incompatible with administrative demands for high client contact and excessive paperwork. The suggestion is then that high quality work and efforts toward high quality may disappear with role overload. Cherniss (1980a) further stated:

> If there is not adequate time due to the constant intrusion of new demands, coping will be disrupted. The individual will tend to fall back on more primitive, less effective, more psychologically defensive coping behaviors. Thus, if there is a high degree of role overload in a job and few structured "time outs" when one can escape from role demands and "work through" the demands that have already been made (Maslach, 1976), emotional exhaustion and burnout are more likely.

Research support exists that links role overload and burnout. Cherniss (1980b) studied 28 newly-employed professionals in public human service agencies. He reported that there was an association between burnout and role overload. In addition, when comparing individuals who were resistant to burnout with those who were most burned-out, he indicated that the burned-out professionals usually had heavier work loads. Barad (1979) found similar results in a study of 845 employees of the Social Security Administration.

In research by the Berkeley Planning Associates (1977) of child abuse programs, it was suggested that an increase in client responsibility alone does not automatically lead to burnout. Although a strong correlation between case load and burnout was reported, the researchers indicated that the case load did not appear to contribute to burnout until the case load number went beyond the

case worker's perceived resources. The implication was that an individual's adaptive capacity would moderate when and to what extent role overload will contribute to job stress and burnout.

Job Stress

As noted in role stressors' research, job stress and role stressors have been consistently tied together. In the present study, the definition for job stress used is the reaction or strain produced from work-related stressors. However, it should be noted that a wide variety of measures have been used as synonymous or closely related to job stress. The terms/measures appear to cut across three basic areas: physiological stress, psychological stress, and behavioral stress.

Physiological stress refers to physical and biochemical measures that have been used to assess the degree of stress within individuals. Selye (1976) viewed a large number of the measures in his research. Some of the measures are chemical parameters (particularly plasma and/or urine levels of ACTH, glucocorticoids, and catecholamines); hematological parameters; muscular function, cutaneous conductance and palmar sweating; adrenocortical function tests; and instruments such as electroencephalogram (EEG), galvanic skin response (GSR), electrocardiogram (ECG), electromyogram (EMG), and polygraphs that determine skin temperature, GSR, pulse rate, blood pressure, and respiration. In addition, physical illnesses, heart attacks, ulcers, and essential hypertension have also been used as measures of stress.

Breif, Schuler, and Van Sell (1981) indicated that although stress and physiological factors tend to be related, the results of nonorganizational research suggest that certain types of stress cannot be directly correlated with individual physiological reactions. Furthermore, some data are indicative of psychological symptoms actually preceding physiological symptoms (Russek &

Zohman, 1958). Therefore, psychological factors may be earlier predictors in identifying the negative impact of stress and intervening to manage the stress more effectively.

Beehr and Bhagat (1985) provided an excellent analysis of job stress from a cognitive-psychological perspective. They summarized the research that supports the perceptual nature of experiencing stress. Cognitive-psychological outcomes such as tendencies to misjudge people and situations as well as to have prominent perceptual distortions that exacerbate potentially stressful situations into full flown crises. The outcome may be experiencing loss of concentration, low self-esteem, inadequacy, feelings of futility, anger, thought disorders, repression, psychosomatic complaints, alienation, psychological fatigue, anxiety, depression, tension, boredom, and job dissatisfaction (Beehr & Newman, 1978). As previously mentioned, many of these have been viewed both anecdotally and in the literature as synonymous with stress as opposed to symptoms. The same confusion of stress with behavioral outcomes also exists.

Behavioral outcomes can be more easily seen as synonymous with stress than psychological outcomes because they are readily observable. Beehr and Newman (1978) provided a lengthy list of potential behavioral outcomes: poor interpersonal relations, aggression, stealing, vandalism, suicide or attempted suicide, pacing, nervous gesturing, risky behavior (i.e., reckless driving and gambling), over- and under-eating, doctors' visits, and drug use or abuse (including alcohol, caffeine, and nicotine). Additional job-related behaviors are turnover, absenteeism, accidents, errors, lowered productivity, grievances, increased use of both medical and mental health insurance benefits, and workers' compensation claims and/or use.

With the impact of job stress being so severe and comprehensive, the importance of understanding its impact and prevention becomes of immeasurable

benefit. If allowed to exist for any duration with high intensity, job stress and an individual's reaction to job stress can lead to burnout. Cherniss et al. (1976) and Cherniss (1980a) propose that the link between job stress and burnout lies in the worker's reaction to the stressors and job stress. It is the sense of hopelessness and helplessness about coping with the stress rather than the stress itself that would then create burnout. Burnout appears to develop when the individual experiences excessive lack of control over his/her environment. To further understand the development of burnout, the theoretical and research bases are reviewed.

Burnout Theory and Research

Thus far, the theoretical development of burnout has been explored from two perspectives: (a) historical, political, and economic (Chapter I); and (b) stages of burnout and burnout stage-related research (earlier in Chapter II). The abundance of theoretical and prescriptive literature on burnout provides fertile ground for understanding both the nature of burnout and the contributing factors. A facet analysis of the symptoms of and contributors to burnout will establish a foundation to examine the burnout research.

Symptoms of Burnout. A review of the theoretical and prescriptive literature on burnout reveals the extensiveness and pervasiveness of the effect of stress in the helping professions. In reviewing 55 burnout references, a total of 87 symptoms was reported. The symptoms were grouped into five categories: (a) cognitive, (b) affective, (c) interpersonal, (d) behavioral, and (e) physical.

Cognitive Symptoms. Evidence of burnout is frequently manifested by a change in one's cognitive style. From an enthusiastic openness to the job, an individual is observed becoming cynical toward recipients of services as well as

toward colleagues and the organization in general. This cynical, negative attitude is the most commonly cited symptom (see Table 2.2) and is expressed toward the caregiver's self as well. A negative self-evaluation leads the individual to question his/her personal competency and thus feel more threatened by external demands.

Table 2.2

Personal Indicators of Staff Burnout in Literature: Cognitive*

	Symptom	Frequency
1.	Cynicism/negative feelings	32
2.	Rigidity	16
3.	Compartmentalizing recipients/dehumanizing	15
4.	Suspiciousness/paranoia	13
5.	Blaming recipients	13
6.	Loss of confidence	11
7.	Apathy	10
8.	Boredom	8
9.	Loss of meaning and direction	8
10.	Inability to adapt to change (resists)	7

*Ten most frequently cited cognitive symptoms in a personal review of 55 preferences.

When threatened, it is common for the individual to became quite rigid in an effort to regain a feeling of control. The rigidity is reflected in a tendency to compartmentalize or dehumanize the service recipients. References to room number, diagnosis, or a negative label may allow the individual to see the

situation as less cognitively and emotionally overwhelming. Thus, the threat is reduced in intensity.

Another method of reducing the threat is to be acutely aware of which people may harm the individual. Suspiciousness and even a paranoid sensitivity to any harmful person and/or situation frequently leads to a hypersensitivity that results in misinterpretation or blame being assigned unjustly to others. Observing the service provider blaming the recipient of the service is then all too frequent as the service provider begins to experience burnout.

When blaming the recipients becomes ineffective, an attitude of apathy or boredom is often seen. Since identifying a threat to oneself and even blaming others does not protect oneself for very long, a non-caring attitude or cognitive style may allow the individual to experience an "If I do not care, others cannot hurt me" feeling. Although the apathetic attitude may serve as a valuable survival technique, such a non-caring attitude may cause one to lose meaning and direction on his/her job. Apathy as a coping method can be seen to have a short-term adaptive effect, but creates still more symptoms over time. With cognitive style affecting one's feelings, it is not surprising that included within symptoms of burnout, strong evidence of affective responses to the burnout experiences exists.

Affective Symptoms. The most commonly cited affective response is that of irritability (see Table 2.3). Irritability fits quite well with the cognitive style of one who is cynical, blaming, dehumanizing, and suspicious. Feeling threatened may lead the professional to feel always on guard for attack and ready to defend. The irritability may increase as the intensity of the threat increases and/or the threat has a long duration. The incessantly threatened feeling frequently establishes a helpless/hopeless feeling, particularly if the

Table 2.3

Personal Indicators of Staff Burnout in Literature: Affective*

	Symptom	Frequency
1.	Irritability	22
2.	Helpless/hopeless feelings	19
3.	Emotional detachment	16
4.	Depression	14
5.	Emotional exhaustion	13
6.	Loss of caring/less empathetic	12
7.	Job dissatisfaction	11
8.	Intellectualization	10
9.	Feelings of alienation	10
10.	Frustration	8

*Ten most frequently cited affective symptoms in a personal review of 55 references.

individual expected to control many aspects of his/her job. The helplessness that seems to be learned is consistent with Seligman's (1974, 1975) learned helplessness model of depression. Not surprisingly, depression is another frequently cited symptom.

A number of other frequently mentioned symptoms appear to be affective attempts to cope with the initial symptoms of irritability, helplessness/hopelessness, depression, and frustration. Coping by emotionally detaching oneself from service recipients is one method that is quite common. Individuals experiencing burnout are often described as uncaring or less

empathic. One way to appear uncaring is to maintain an overly intellectual approach to interactions.

When such coping mechanisms do not work effectively, other symptoms of burnout emerge. The caregivers describe themselves as feeling alienated from clients, colleagues, and the organization. A general sense of job dissatisfaction is present. As the individual progresses in the stages of burnout, a sense of emotional exhaustion becomes more and more prevalent. Feeling emotionally drained and very incapable of responding in an affectively productive manner, interpersonal symptoms occur with greater and greater frequency.

Interpersonal Symptoms. Withdrawal and isolation from both the recipients of service and one's colleagues are extremely common (see Table 2.4). The types of withdrawal may be as slight as reducing eye contact, sitting or standing further away from others, and communicating in a generalized, stereotyped manner (Maslach, 1979). As the caregiver experiences greater stress, the effort to avoid further demands often reaches missing staff meetings, cancelling appointments, spending more time on predictable bureaucratic tasks, and staying home from work. Withdrawal as a coping behavior temporarily reduces the demands for emotional responses, but frequently creates other problems at home and work.

The withdrawal and attempted isolation elicits new demands from one's family and peers. Relationships at home, particularly marital, begin to be strained. The caregiver may feel trapped that there is now nowhere to retreat from people demands. Marital and family conflict escalate to the points of separation and divorce.

The result is further self-imposed isolation. Not wanting to burden others or risk rejection, the individual experiencing burnout frequently cuts off all

Table 2.4

Personal Indicators of Staff Burnout in Literature: Interpersonal*

	Symptom	Frequency
1.	Withdrawal/isolation from recipients	24
2.	Withdrawal/isolation from colleagues	22
3.	Marital problems	13
4.	Withdrawal/isolation from family	9
5.	Strained relationships	7
6.	Family conflict	7
7.	Loss of friends	4
8.	Overbonding with colleagues	2
9.	Oversocializing	1
10.	Sexual promiscuity	1

*Ten most frequently cited interpersonal symptoms in a personal review of 55 references.

friendships. With little or no support system existing, the caregiver may make feeble attempts at people contact through sexual promiscuity or excessive, superficial social contacts. Occasionally, an equally stressed colleague may act jointly with the individual in a superficial manner to give each a way of maintaining some contact with the outside world. However, such withdrawal prevents the caregiver from continuing to function productively at work.

Behavioral Symptoms. By far the most frequently cited behavioral symptom is that of deterioration in work performance (see Table 2.5). With so much of the time and so much effort being used to defend one's vulnerability,

Table 2.5

Personal Indicators of Staff Burnout in Literature: Behavioral*

	Symptom	Frequency
1.	Poor work performance	20
2.	Substance abuse	13
3.	Absenteeism	11
4.	Turnover/leaving job	9
5.	Increase in risk-taking behavior	7
6.	Violent and aggressive behavior	7
7.	Over-involvement with work	2
8.	Theft on the job	2
9.	Suicide	1
10.	Over or under eating	1

*Ten most frequently cited behavioral symptoms in a personal review of 55 references.

little time and energy are left for productive activity (Garfield, 1980; Veninga, 1979). Most of the caregiver's behavior becomes excessive.

As previously mentioned, there is a tendency to withdraw from recipients and colleagues. The extreme of such withdrawal is frequent absenteeism and eventually leaving the job or the whole field of caregiving. If the less extreme methods of distancing have not been working, it is not uncommon for the individual experiencing burnout to use substance abuse to lessen the pain of involvement. The use of alcohol and other drugs gives the individual the illusion of protection from the demands from others. Unfortunately, the use may also lessen the individual's control and inhibitions regarding some high risk behaviors.

A greater frequency of risk-taking behaviors such as over-medicating patients, more excessive restriction of patient activities, socializing with recipients, and substance abuse at work is noted (Hall et al., 1979). In institutional settings, the amount of violent and aggressive behavior toward residents by caregivers is reported. The individual experiencing burnout is observed over-reacting and being excessively emotional in even minor work situations. Over-reacting may also be against colleagues and the employer.

Evidence of such reaction is seen in increases of employee theft and excessive criticism of other staff. The criticism may stem from the caregiver becoming overly involved with work to reduce his/her feelings of incompetence. Thus, the individual may criticize other employees for not spending more time at work, not caring about the recipients, and not making the right decisions. Such behavior further alienates the individual from potential support, and suicide may be seen as a viable alternative by the caregiver. Another method that has strong physical implications is that of over- or under-eating. Excessive eating behaviors may also complicate other physical symptoms.

Physical Symptoms. Chronic fatigue is one of the first symptoms reported by the caregiver (Welch, Mederos, & Tate, 1982) (see Table 2.6). Over time, the fatigue leads to a feeling of total physical exhaustion. Sleep disorders further deplete the individual's physical resources as the day-to-day recovery from physical and emotional demands becomes impossible.

With one's physical condition deteriorating, psychosomatic symptoms are more common than before. Stress reactions such as headaches, gastrointestinal disturbances, and frequent and/or prolonged colds are observed (Freudenberger, 1974). The caregiver may experience chronic muscle tension, sudden weight loss or gain, and shortness of breath. Frequently, the individual becomes so involved

Table 2.6

Personal Indicators of Staff Burnout in Literature: Physical*

	Symptom	Frequency
1.	Chronic fatigue	22
2.	Physical exhaustion	19
3.	Insomnia/sleep disorders	15
4.	Headaches	12
5.	Gastrointestinal disturbances/ulcers	12
6.	Psychosomatic symptoms	8
7.	Frequent and/or prolonged colds	8
8.	Muscle tension	7
9.	Sudden weight loss or gain	6
10.	Shortness of breath	4

*Ten most frequently cited physical symptoms in a personal review of 55 references.

with treating the physical symptoms that s/he totally ignores what factors are actually contributing to all the symptoms of burnout.

Contributors to Burnout. Individual reports of contributors to burnout may often be very narrow or vague. However, when 48 articles citing factors contributing to burnout were reviewed, a total of 59 factors were found. These factors were grouped into the following four areas: (a) individual, (b) job, (c) organizational, and (d) environmental.

Individual Contributors. Although authors such as Pines, Aronson, and Kafry (1981) have chosen to look primarily outside the individual worker for factors contributing to burnout, most authors see burnout as being an interaction

between the individual's internal functioning and external factors. The most frequently cited individual factor is an idealistic view of what can be accomplished on the job (see Table 2.7). Such idealism leads to unrealistic expectations of self, co-workers, clients, the organization, and the population in general which results in the caregiver's continually being disappointed or seeing him/herself as a failure. Cherniss et al. (1979), in particular, have focused on this idealism and termed it the "professional mystique." Armed with a degree and idealism, the new worker frequently rushes into the job with a wealth of enthusiasm that is seen as the first stage of burnout (Edelwich & Porodsky, 1980).

Table 2.7

Individual Contributions to Staff Burnout*

	Contributor	Frequency
1.	Unrealistic expectations/idealism	15
2.	Overcommitment/overdedication	12
3.	Difficulty setting limits	7
4.	Overidentification with job	6
5.	Personal needs secondary	5
6.	Crusading attitude/all things to all people	4
7.	Lack of self-awareness	3
8.	Achievement-oriented	2
9.	Poor work habits	2
10.	Refusing to compromise	2

*Ten most frequently cited individual contributors in a personal review of 48 references.

Such enthusiasm adds to the unrealistic expectations by blinding the individual to the realities of the job. It also leads to the second most commonly cited contributor which is an over-commitment or over-dedication to the job. Freudenberger (1974, 1975) emphasized how new workers and volunteers tend to spend far more than the hours required at the work setting. The attitude is commonly one of, "If I only spend more time, I could solve all the problems." Nothing appears to be too much to ask of the individual as s/he sees him/herself with unlimited internal resources to meet any demand.

The inability to set limits then becomes another contributing factor to the burnout process. Such a caregiver views him/herself as his/her job. All personal needs become secondary to whatever demands are placed on the individual personally, organizationally, or environmentally. A crusading attitude in which the individual attempts to be all things to all people prevails. With crusading as the prevailing attitude, the caregiver demonstrates a lack of self-awareness that further facilitates the burnout process.

The process of burnout also contains the rigidity of purpose that lends itself to an uncompromising stand by the caregiver. Refusing to compromise is consistent with the excessive achievement-oriented drive cited by Freudenberger and Richelson (1980). Solving all problems becomes a virtual obsession with the new worker. Also, being a new worker, the individual frequently has not had the opportunity to develop the work habits necessary to accomplish the demands of the job. Most new workers have, in fact, not been prepared for the job demands that also contribute to burnout.

Job Contributions. The three most commonly cited factors, as indicated in Table 2.8, were identical to those cited by Kahn (1974) as being the primary contributors to job stress. Role overload, role conflict, and role

ambiguity have been extensively discussed as stressors on one's job since the pioneer research by Kahn et al. (1964). The individual must learn to adjust to the external demands that are a consequence of his/her position within the organization. In the case of role overload, the perceived demands may be of a quantitative or qualitative nature. Quantitative role overload occurs when the sheer volume of work, such as number of clients and/or paperwork, exceeds the amount the individual deems him/herself as capable of completing. When the caretaker is required to perform too close to perfection, qualitative role overload may occur. The caretaker may see the job as requiring absolutely no mistakes or resolution to a client's problems within a few sessions. In both

Table 2.8

Job Contributions to Staff Burnout*

	Contributor	Frequency
1.	Role overload	16
2.	Role conflict	15
3.	Role ambiguity	13
4.	Type of client/countertransference	13
5.	Emotional demands	9
6.	Client focus	6
7.	Responsibility without authority	5
8.	Isolation caused by job responsibilities	5
9.	Mundane tasks/excessive paperwork	4
10.	High client-staff ratio	4

*Ten most frequently cited job contributors in a personal review of 48 references.

quantitative and qualitative role overload, the individual experiences much more being demanded by the job than is internally available.

One way that excessive demands occur is through the closely related process of role conflict. When incompatible demands are being made upon the individual by one or more sources, the individual is likely to feel torn between demands and, thus, overwhelmed by which direction to take. Such conflicting demands may be made by such combinations as clients-organization, organization-community, clients-peers, peers-organization, and clients, peers, organization, or community with the individual him/herself. No matter what the dilemma, the caretaker is faced with the possibility of meeting one demand but failing to meet another. The resultant stress has been discussed as an interaction of organizational and human demands by Yee (1981). The lack of a clear choice concerning what decision to make is related to role ambiguity.

In the case of role ambiguity, there is a lack of clarity concerning what is expected of the individual and/or how the individual will be evaluated. Bryan (1981) pointed out that lack of clarity regarding tasks and directions leads directly to lack of perceived success. Seeing oneself as a repeated failure or never succeeding can lead to further hesitation in job decision-making and eventually to the final stage of burnout referred to as apathy.

Particular types of clients may create more role stressors than others. Maslach (1978) and Lamb (1979) have described a number of client characteristics that appear to cause inherent problems. They point specifically to clients such as mentally retarded and schizophrenic who show little or no improvement. An idealistic caretaker may feel both external and internal demands to make the client improve. A lack of success may signal lack of competence to the caretaker. Further feelings of incompetence may be fostered by a tendency for "successes" to leave and "failures" to come back as reminders of lack of success.

Clients having types of problems that elicit strong feelings such as fear, anger, embarrassment, or frustration may also be quite emotionally demanding (Maslach, 1978). Freudenberger (1977) reported that countertransference is frequently a problem in working with children. Other authors have pointed to special populations that seem to extract a particular emotional toll (Marshall, 1980, dying patients; Weiskoff, 1980, exceptional children; Munro, 1980, mentally retarded; Kamis, 1981, psychotic and spinal injured patients). Over time, the caretaker may begin to feel drained of emotion since each client contact has seemed to elicit some emotional response. Part of the caretaker's felt need to respond stems from a total client focus.

Most training programs emphasize a client-problem orientation as opposed to teaching the caretaker to also be aware of personal needs (Pines, Aronson, & Kafry, 1981). Such an orientation leads to the ignoring of personal needs until the needs have begun to drastically affect one's work performance. The tendency is then to feel guilty for not being more client focused and to question one's competency to work in human services. The caretaker may also find a lack of sensitivity to employee needs. Having responsibility for meeting the client's demands without authority from the organization is a prime example.

It is common for the caretaker to be isolated by his/her job responsibilities. A frequent example in the literature is the case of high client-staff ratio. Pines and Maslach (1978) reported that high client-staff ratio may mean that the caretaker is in constant contact with the client. As a result, the emotional, cognitive, and physical demands on the caretaker are never ending. The individual's only break from client contact may be to complete excessive paperwork or mundane tasks that are demanded as part of one's job.

Organizational Contributors. Feeling unable to meet job demands may lead to burnout very quickly under particular organizational conditions (see Table 2.9). The most commonly cited organizational condition in the review was lack of system support. A caregiver appears to be able to adapt more effectively to demands if there is a sense of being supported by the organization and those around him/her if s/he feels alone in meeting the demands (Kamis, 1981; Emener, 1979). Cherniss et al. (1979) has suggested that a perception of staff support increases the caregiver's resources to meet the demands as well as sharing the responsibility of the demands.

Table 2.9

Organizational Contributions to Staff Burnout*

	Contributor	Frequency
1.	Lack of system support	12
2.	Low pay	8
3.	Authoritarian management	6
4.	Organizational focus on negative factors	6
5.	High organizational turnover	5
6.	Poorly defined communicative system	4
7.	Lack of flexibility in meeting demands	3
8.	Poor opportunity for advancement	3
9.	Poor work atmosphere	3
10.	Poor job security	3

*Ten most frequently cited organizational contributors in a personal review of 48 references.

When the individual is not experiencing success or system support, s/he may look to pay to verify his/her status or self-worth. Ryerson and Marks (1981) and Morocco (1981) reported that low pay may become a strong contributor to burnout since it may be interpreted by the caretaker as evidence for a lack of competence. Further evidence that may lead to perceived lack of competence includes authoritarian management and an organizational focus on negative factors. Freudenberger (1975) reported that managers who do not delegate and maintain total control over an organization may not allow other organization members to experience success or feel competent. He also indicated that authoritarian managers are in grave danger of burnout themselves.

Further undermining of a caregiver's felt confidence stems from a negative organizational focus. A continual emphasis of an employee's shortcomings without attention to positive points and successes may well lead to a depressed and/or hopeless feeling on the part of the caregiver. The caretaker who lacks confidence then becomes more vulnerable to other normal demands and stressors of the job. As a result, the individual's job performance may drop, and the individual may even leave his/her job to escape.

Such turnover, if it becomes excessive, may be a threat to the entire system. High turnover was reported a contributor to burnout due to its effect on peer support and continuity of treatment. It becomes difficult for the caretaker to trust or feel supported by a series of new employees. In addition, the remaining caretakers may have to take on additional work in client care and in training new employees. Demands such as these eventually go beyond the internal resources of the individual and ineffective coping behaviors occur.

Another frequently cited organizational contributor to burnout is that of poorly defined communication systems. Disrupted communication may lead to factors such as role conflict and ambiguity, reduced job performance, and

perceived lack of support. The caregiver may not be aware of existing organizational resources or may receive conflicting information on organizational policies and procedures. A caregiver can then easily feel confused at what decision to make or isolated by a lack of communication.

A counterpart of ill-defined communication systems is the organization system that is so rigidly defined that the caregiver is restricted in meeting demands. Workers in bureaucratic or governmental agencies frequently report such a problem. The result is a limitation in available responses in which burnout symptoms like rigid behavior and dehumanization of clients takes place. Other frequently cited organizational contributors that were reported were poor opportunity for advancement, poor work atmosphere, and poor job security.

Environmental Contributors. Not all contributors to burnout came from within an individual or organization. Five factors were cited in the literature of burnout contributors that are extra-organizational in nature. Heading the factors is that of marital or family problems which create pressures in the home. The caregiver is asked to give emotionally at work and giving may be very difficult if the individual is struggling emotionally away from work. Often, caregivers feel as if they have nothing left to give at either place and begin to isolate themselves for protection.

Not only home pressures, but other life events also extract from a caregiver emotionally. Events such as car accidents, social conflicts, and financial problems may all act as further stressors to an already demand-laden individual. Related factors such as economic inflation or recession and governmental budget cuts also may add pressure. When a caregiver feels most in need of support, another form of support may be lacking.

Kamis (1981) has indicated that lack of public support for an individual's organization or type of work may also contribute to burnout. Caregivers working with impaired individuals are sometimes seen as fostering weakness. Human services programs may be of low value to others, particularly during difficult economic times. A human services worker may find that s/he is not valued and/or may be ridiculed by others. Such lack of support only adds to the individual, job, and organizational contributors which already exist. Research on both the symptoms of and contributors to burnout help verify the relationships among individual, organizational, and environmental factors.

Burnout Research

Contributors to and symptoms of burnout have been widely discussed and postulated in the literature. The reported research, although comparatively sparse, provides important information to the burnout literature. Research on burnout can best be divided into three groups based primarily on the instrumentation used to assess burnout. The three groups are (a) Maslach and associates--Maslach Burnout Inventory, (b) Jones and associates--Staff Burnout Scale for Health Professionals or its related burnout scales, and (c) other research--various measures of burnout. Research by Maslach and her associates is discussed in more detail than the other two areas since it uses the same instrument to measure burnout as the current study. The burnout research is introduced by a review of the Perlman and Hartman (1982) summary of the existing literature.

In an effort to assess the current status of burnout in the literature, select a suitable definition, review burnout research, and identify directions for future research, Perlman and Hartman undertook their 1982 study. From 1974 to early 1981, they identified 48 writings of which five presented statistical analysis.

Based on a synthesis of definitions after a content analysis, Perlman and Hartman concluded burnout is " . . . a response to chronic emotional stress with three components: (a) emotional and/or physical exhaustion, (b) lowered job productivity, and; (c) overdepersonalization" (p. 293).

After reviewing the research articles, they summarized the results into the categories of organizational characteristics, perceptions of organization, perceptions of role, individual characteristics, and outcome. Variables identified as being significantly related to burnout are reported in Table 2.10.

Table 2.10

Variables Reported to Be Related to Burnout

Organization Characteristics	Perceptions of Organiz.	Perceptions of Role	Individual Characteristics	Outcome
Caseload	Leadership	Autonomy	Family/friends' support	Satisfaction
Formalization	Communication	Job involvement	Sex	Turnover
Turnover rate	Staff support	Being supervised	Age	
Staff size	Peers	Work pressure	Tenure	
	Clarity	Feedback	Ego level	
	Rules and procedures	Accomplishment		
	Innovation	Meaningless-ness		
	Administrative support			

(adapted from Perlman and Hartman, 1982)

The results of the Perlman and Hartman summary emphasize the need for a more extensive understanding of the burnout concept. They point to the work of Maslach as being critical due to the extensive work in the development of the Maslach Burnout Inventory. Both their theoretical conclusions and research review support the work of Maslach and her associates as the foundation of burnout research.

Maslach and Associates. The early work of Maslach did not present statistical analyses or use a particular measure of burnout. Instead, it provided a means of developing the burnout construct and the hypotheses to be assessed in their later work. It is provided here to establish an understanding of the construct's development and early burnout research.

Early Research. The first burnout research was published by Maslach (1976). Using the methodologies of observing work, conducting personal interviews, and collecting questionnaires, 200 professionals were assessed. Low morale, increased absenteeism, frequent job turnover, and decreased productivity characterized the employees that she termed burned out. The sample was comprised of social workers, psychiatric nurses, poverty lawyers, and prison personnel. Maslach noted that certain indices of human stress such as alcoholism, marital conflict, mental problems, and suicide attempts were associated with the burned-out group. She pointed out that even though these professionals may have been trained in particular healing or service skills to do their jobs, they were not prepared for repeated, intense, emotional interactions with others.

As a reaction to their experiences, helpers displayed consistent measures to adapt. The following behaviors characterize their attempts to adapt: (a) attempts to balance concern for recipients of service with a psychological

detachment, (b) a tendency to intellectualize stressful predicaments, (c) attempts to rigidly compartmentalize their work and non-work lives, (d) withdrawing from service recipients, and (e) relying on other staff for support. Groups who had a lower burnout rate tended to actively express, analyze, and share their personal feelings rather than withdraw as burned out group members did. The coping behaviors were reported to have been influenced by both personal reaction and organizational factors.

Maslach states that, in cases where voluntary time outs to get temporarily away from service recipients were prevented, employees experienced lower morale and greater emotional stress. A greater number of complaints from dissatisfied recipients was also reported. Longer working hours were related to symptoms of burnout when these longer hours involved more contact with recipients. A concurrent condition was also the report of a negative attitude by staff toward clients. Although the study was the first research report on burnout, no report of statistical results was given--a characteristic common in early burnout research.

A second study using a narrative rather than statistical format of reporting was that by Maslach and Pines (1977). Their research used an interview-questionnaire format with 83 staff members employed in four day care centers. Child-staff ratios in the centers ranged from 1:4 to 1:12. Maslach and Pines found the following factors to be correlated with staff burnout: (a) high child-staff ratios; (b) long working hours with high client contact; (c) a limited availability of time outs away from clients; (d) infrequent staff meetings; (e) very open, permissive, and non-directive programs; and (f) staff who did not express, analyze, and share personal feelings with other staff. They also collaborated on additional burnout research in a different type of setting.

Pines and Maslach (1978) studied staff burnout in mental health institutions. Psychiatrists, psychologists, social workers, nurses, attendants, and volunteers made up the 76 staff interviewed. Again, the research was reported in a narrative, summary format. Staff members tended to exhibit more symptoms of burnout than other staff if they were higher ranking staff who worked longer hours with more severely impaired patients and a longer tenure in the mental health field. These staff members worked in situations with higher patient-staff ratios, had more administrative-paperwork duties, and the general workload was not shared with other staff. They experienced a lack of time out availability and felt little input into institutional policies as well as lack of control and authority over their work. In contrast to the findings in Maslach and Pines (1977), a large number of formal staff meetings was associated with burnout symptoms than a small number of informal staff meetings.

Recent Research. The above factors contribute strongly to the experience of stress and burnout symptoms and also lead to coping behaviors to combat the symptoms. Pines and Maslach report that five patterns of behavior were observed. Of the techniques, the most successful was that of detached concern or treating patients in an objective, detached way while maintaining real concern for them. Other methods were intellectualization, rigid compartmentalization of work and home life to keep them separate, withdrawal from patients, and reliance on other staff for creating distance between the person and patient.

The previously-cited research established the foundation for the first study using the Maslach Burnout Inventory (MBI). Maslach and Jackson (1978) presented their research with 91 mental health and social services workers in an unpublished paper. The study was focused on the relationships between subscales

on the MBI and subscales of the Job Diagnostic Survey (JDS) developed by Hackman and Oldham (1975). Gann (1979) replicated the JDS and MBI components of the study in her work with 78 female social workers. Definitions of the two instruments' subscales are given in Table 2.11.

Table 2.11

Subscale Definitions for the Maslach Burnout Inventory and Job Diagnostic Survey Scales

Subscales	Definitions
Maslach Burnout Inventory	
Emotional Exhaustion	Feelings of being emotional overextended and exhausted by one's work
Depersonalization	Unfeeling and impersonal response toward recipients of one's service, care, treatment, or instruction
Personal Accomplishment	Feelings of competence and success achievement in one's work with people
Job Diagnostic Survey	
Experienced Meaningfulness of the Work	Degree to which the employee experiences the job as one which is generally meaningful
Feedback from the Job Itself	Degree to which carrying out the required work activities gives the employee direct and clear information about job performance
Knowledge of Results	Degree to which employee knows how effectively the job is being performed
Task Significance	Degree to which the job has a substantial impact on the lives or work of other people
Growth Satisfaction	Degree to which the job provides opportunities for personal growth and development
General Job Satisfaction	Degree to which the job is generally satisfying

The two studies offer one of the few opportunities in burnout literature that uses the same instrumentation in both studies. Such an opportunity allows for cross validation of results and thus strengthens the possibility of causative relationships existing. Although there are differences in the studies, all reported jointly significant relationships, stated in Table 2.12. It should be pointed out that while the JDS subscales are scored in a unidimensional method, the MBI subscales are scored on two dimensions. The first dimension is frequency (how often people have the feelings), and the other is intensity (the strength of these feelings).

The only JDS subscale in both studies that was significant on all three MBI subscales for both frequency and intensity was feedback from the job itself. Having a negative relationship with emotional exhaustion and depersonalization as well as positive with personal accomplishment, it relates to how much one's work activities give direct and clear feedback about one's job performance process. The negative importance of the lack of clear information about job performance has been established in the job stress literature and is referred to as role ambiguity in the present study. Not having the feedback of clear information regarding job performance then has a significant negative association with one's feelings of emotional strength toward service recipients and about personal competence.

A similar JDS subscale, knowledge of results, also related to feedback information and negatively associated to both frequency and intensity for the emotional exhaustion and depersonalization MBI subscales. Personal accomplishment was related negatively to knowledge of results, but only for frequency and only in the Maslach and Jackson study. Both information about the job performance process and results of job performance are important in reducing feelings of burnout in service providers.

Table 2.12

Summary of Maslach Burnout Inventory and Job Diagnostic Survey Relationships

	Emotional Exhaustion				Depersonalization				Personal Accomplishment			
	M & J		Gann		M & J		Gann		M & J		Gann	
	F+	I#	F+	I#	F+	I#	F+	I#	F+	I#	F+	I#
Experienced meaningfullness of the work	ns	ns	ns	ns	$-.32^{c}$	$-.21^{a}$	$-.24^{a}$	$-.25^{a}$	$.27^{b}$	$.19^{a}$	$-.28^{a}$	$-.24^{a}$
Feedback from the job itself	$-.24^{a}$	$-.38^{b}$	$-.20^{a}$	$-.21^{a}$	$-.44^{c}$	$-.38^{c}$	$-.34^{b}$	$-.40^{b}$	$.38^{c}$	$.29^{b}$	$-.32^{b}$	$-.24^{b}$
Knowledge of results	$-.31^{b}$	$-.21^{a}$	$-.26^{b}$	$-.22^{a}$	$-.31^{b}$	$-.28^{b}$	$-.30^{b}$	$-.30^{b}$	$.20^{a}$	ns	ns	ns
Task significance	ns	ns	ns	ns	ns	ns	ns	ns	$.19^{a}$	$.18^{a}$	$-.22^{a}$	$-.27^{b}$
Growth significance	ns	ns	ns	ns	$-.47^{c}$	$-.39^{c}$	$-.32^{b}$	$-.27^{b}$	$.41^{c}$	$.29^{b}$	$-.44^{b}$	$-.36^{b}$
General job satisfaction	$-.23^{a}$	$-.23^{a}$	$-.52^{b}$	$-.43^{b}$	$-.22^{a}$	ns	$-.39^{b}$	$-.32^{b}$	ns	ns	ns	ns

+ = frequency
# = intensity
a = $p < .05$
b = $p < .01$
c = $p < .001$
ns = not significant

NOTE: all p values are two-tailed

M & J = Maslach and Jackson (n = 91)
Gann = Gann (n = 78)

Two JDS subscales related to one's satisfaction were also associated negatively with two burnout subscales. Both general job satisfaction and growth satisfaction (satisfaction about opportunities on the job for personal growth and development) were negatively correlated with frequency and intensity of depersonalized feelings toward service recipients, the exception being intensity for the Maslach and Jackson study. General job satisfaction was also negatively related to emotional exhaustion whereas personal accomplishment and growth satisfaction were negatively associated.

When contacts with service recipients elicit an unfeeling, impersonal response by the service provider, the service provider finds it difficult to also experience job satisfaction or feelings of personal growth. Feelings of job competence appear to be closely tied to opportunities for personal growth on the job, but not to job satisfaction. Conversely, feeling emotionally exhausted is unlikely to occur concurrently with job satisfaction, but the same relationship does not appear to exist with personal growth opportunities. The authors in both studies state that although a relationship does exist between job satisfaction and burnout, the magnitude of the correlations, even though significant, are so low that one cannot conclude that burnout and job dissatisfaction are not synonymous.

Another subscale on the JDS reported by Gann to be an extension of growth satisfaction is that of motivating potential. This subscale is a measure of one's desire to obtain personal growth on the job when the opportunity exists. She reports that the depersonalization MBI subscale is negatively related to motivating potential (frequency: $-.39$, $p < .01$) (intensity: $-.42$, $p < .01$) and positively related to the personal accomplishment MBI subscale (frequency: $-.46$, $p < .01$) (intensity: $-.46$, $p < .01$). One's feelings toward the service recipients as well as feelings of job competence are associated with both the

perception that opportunities exist on the job for growth and one's desire to act on the opportunities. Gann (1979) also found that satisfaction with job security was negatively related to frequency of feeling emotionally exhausted (-.23, $p < .05$) and that there was a positive association between frequency of feeling competent and reported satisfaction with one's supervisor (.20, $p < .05$). It appears that various feelings of burnout are related to a variety of job satisfactions.

Just as burnout is tied to job satisfactions, it is also related to how meaningfully one experiences work. Both the Gann (1979) and Maslach and Jackson (1978) studies found relationships between the JDS's experienced meaningfulness at the work with depersonalization and personal accomplishment. A depersonalized response to service recipients is negatively associated with meaningful work. Conversely, meaningful work is positively associated with feelings of personal competence. The relationships held for frequency and intensity of feelings in the two studies.

The meaningfulness of one's work to others in terms of its impact seems to be related to one's own feelings of competence. A JDS subscale entitled task significance measured the job of a service provider as it impacted the lives and work of others. The greater one's job is perceived as having an impact, the more competent one seems to feel. Such a finding would seem consistent with the notion that those experiencing burnout at their jobs have feelings of helplessness and powerlessness (lack of impact on others).

The two studies compared here received very limited exposure in psychological research literature. Maslach and Jackson's research was a paper presented at the 1978 Western Psychological Association Convention, whereas Gann's 1979 research was her doctoral dissertation. Conversely, the first published research using the Maslach Burnout Inventory (Maslach & Jackson,

1979) received wide exposure, but reported no statistical figures as it was published in Psychology Today. Statistical results from the study have been listed in the MBI Manual (Maslach & Jackson, 1981a), as well as in a research article on the MBI by Maslach and Jackson (1981b).

Maslach and Jackson (1979b) used a questionnaire survey to collect information from 142 policemen and their wives. The officers' wives were surveyed to give an external validation of the officers' reported personal experiences. On the surveys, the wives indicated observed frequencies of their husbands' behaviors which had been predicted to relate to the emotional exhaustion and personal accomplishment MBI subscales. Since the wives had no opportunity to observe their husbands with other people on their jobs, they were not asked to rate behaviors related to the depersonalization subscale. The wives' ratings were then compared with their husbands' MBI subscale scores. Policemen also filled out additional survey information.

The policemen stated they were very likely to cope with stress by drinking (.24, $p < .01$) and were reported by their wives to have frequent insomnia problems (.24, $p < .01$). Officers with high scores on emotional exhaustion (EE) and low personal accomplishment (PA) scores were identified by their wives as using medication frequently (EE: .21, $p < .01$; PA: -.33, $p < .001$). By self report, low personal accomplishment scores were closely related to use of tranquilizers (-.21, $p < .01$).

Numerous relationships between dimensions of burnout with police officers related to their family and friends. Policemen scoring high on emotional exhaustion reported wanting to spend time alone rather than with family (.19, $p < .05$). When scoring high on emotional exhaustion and depersonalization (D), they acknowledged getting angrier at their wives and children than did low scorers (EE: .29, $p < .001$; D: .28, $p < .001$). Frequent feelings of

depersonalization were related to reports of few friends (.20, $p < .05$). Additionally, wives of officers with high depersonalization scores indicated they did not share the same friends as their husbands (.24, $p < .01$) and were likely to be absent from their family celebrations (.21, $p < .01$). The officers experiencing high depersonalization and low personal accomplishment saw their children as being emotionally distant from them (D: .24, $p < .01$; PA: -.39, $p < .001$). Wives of officers scoring high on the intensity dimension of depersonalization reported their husbands did not care about them (.17, $p < .05$) or share feelings with them (.19, $p < .02$). Evidence then exists to suggest that there are marked relationships between dimensions of burnout with self-medicating behaviors (using alcohol, drugs, medication) and family relationships.

The study of policemen and their wives added substantially to the existing literature. Although police officers may not be thought of as traditional care givers, the service they provide is clearly people-related. In addition, the use of their wives to give external validity for officers' experiences strengthened the results obtained. Some of the statistical reporting format used resulted in confusion with interpretation of the results. In some cases Maslach and Jackson combined frequency and intensity scores if they were both significant, while on others they did not (more specific results are given in Table 2.13). They also did not report the total MBI burnout score, yet referred to policemen experiencing burnout if they had one dimension of one subscale as significant.

Such an approach raises questions as to when an individual is actually experiencing burnout. Is one out of the possible six dimensions enough? Does significance on the emotional exhaustion dimension indicate one is experiencing more burnout symptoms since emotional exhaustion accounts for more of the total scale variance (56.2% for frequency and 55.4% for intensity)? Although the three subscales are factorially separate, it is possible that they should be

combined into one score when burnout is discussed or not discuss the general construct of burnout at all.

As indicated earlier, few research studies using the MBI have been published. However, Maslach and Jackson (1981b) reviewed two additional research studies in their article on the MBI's development. The first was an unpublished study they conducted with 40 mental health workers. It is relevant to the present study since it used a similar population and received external validation from co-workers.

Each of a group of 40 mental health workers completed an anonymous behavioral evaluation of a selected co-worker who had also completed the MBI. The care givers who were rated by their co-workers as being emotionally drained scored higher on emotional exhaustion (frequency: .28, $p < .05$; intensity: .41, $p < .01$) and depersonalization (frequency: .56, $p < .01$; intensity: .57, $p < .001$) than other mental health workers. Higher scores on emotional exhaustion and depersonalization were also associated with co-worker reports of being physically fatigued (EE frequency: .42, $p < .01$) (D frequency: .55, $p < .001$; D intensity: .50, $p < .01$). Mental health workers with higher depersonalization scores were also rated as complaining more about their clients (frequency: .32, $p < .05$; intensity: .33, $p < .05$) and being absent more frequently than other workers (intensity: .30, $p < .05$). Higher intensity emotional exhaustion scores were also associated with a worker's taking more breaks (.29, $p < .05$) and evaluating clients negatively (.33, $p < .05$). Again, as in the police study, external validation of behavior related to the experienced feelings increases confidence in accepting the validity of the burnout experience.

Maslach and Jackson (1981b) also reported on a nation-wide survey of 845 public contact employees in the Social Security Administration. The study conducted by Barad (1979) is unpublished, and the authors only report the results

Table 2.13

Summary of Burnout with Policemen

	High Emotional Exhaustion		High Depersonalization		High Personal Accomplishment	
	Freq.	Inten.	Freq.	Inten.	Freq.	Inten.
Upset and angry	.34***	.34***				
Tense or anxious	.27***	.25**				
Physically exhausted	.20**	.15*				
Complaining about problems	.26***	.29***				
Gets angry at family	.16*	.26***	.16*	.28**		
Wants to be alone, not with family	.16*	.19*				
More insomnia	.24**	.19*				
Takes a drink	.24**	.19*				
Uses medication	.17*	.21**				
See children as emotionally distant			.32***	.24**		
Absent from family celebrations			.21**	.15*		
Fewer friends			.22**	.20*		
Officer and wife have different friends			.17*	.24**		
Cheerful or happy					.25**	n.s.
Work brings pride and prestige					.24**	n.s.
Sees children as emotionally close					.38***	.33***
Fewer tranquilizers					-.18*	-.21**
Fewer medications					-.28**	-.33***

*p = .05
**p = .01
***p = .001

(Adapted from Maslach and Jackson, 1981b) (n = 142)

in a narrative form. Barad's study is of importance due to its nation-wide scope, sample size, and as research with a different population than that previously reported. In the Social Security Administration study, employees scoring high on emotional exhaustion and depersonalization as well as low on personal accomplishment were likely to express an interest in leaving their jobs within a year and in spending less time with the public. When caseloads were high (over 40 people served per day), the same subscale pattern arose. The latter is consistent with the proposition that role overload would contribute to burnout in the present research. Barad also noted that individuals scoring low on job autonomy tend to score high on the emotional exhaustion and depersonalization subscales. As in other studies with the MBI, no total burnout scores were reported.

Maslach and her associates clearly have done the most complete research on burnout despite some of its confusion in reporting subscales, subscale dimensions, and frequently writing the results in narrative form. The Maslach Burnout Inventory also has been well-developed and has demonstrated psychometric properties to be used in the present research. It was selected as the instrument of choice in the present research due to the existing research and development. However, other researchers using different instruments have also contributed to the breadth of the burnout construct in the human services field.

Jones and Associates. John W. Jones initially developed the Staff Burnout Scale for Health Professionals (SBS-HP), but then developed two related scales for specific populations. The title of "The Staff Burnout Scale for Police and Security Personnel" clearly explains its intended population, while "The Employee Burnout Scale" was intended for any employee having contacts with customers, clients, patients, or co-workers. To an even larger extent than

with the MBI, Jones has not reported his results statistically, but in narrative form. Results were taken from summaries of research in 1981 (b,c).

The SBS-HP was used in the initial research. It is scored as one unidimensional instrument although it contains four factors: (a) dissatisfaction with work, (b) psychological and interpersonal tensions, (c) physical illness and distress, and (d) unprofessional patient relationships. Jones (1981b) pointed out that it differed from the MBI in that the MBI assesses a psychological or affective experience while the SBS-HP assesses cognitive, affective, behavioral, and psychological reactions in the burnout syndrome. The SBS-HP is composed of 30 items, 10 of which form a lie scale to identify "good fake" tendencies. He reported a reliability of .93 but did not identify what type of reliability it is. Jones suggested that since there were relatively high intercorrelations among the 20 items, a general state of staff burnout was being assessed.

The relationship of staff burnout to perceived family support and encouragement was reported by Jones (1981b). Using the SBS-HP as the measure of burnout, 30 caretakers of developmentally disabled children were also asked to assess the amount of family support they received regarding work-related issues. Caretakers were divided into two groups, with members of the first describing their families as being supportive and viewing their work as valuable, while individuals in the second group received little or no support from their families. Results were significantly indicative of the second group experiencing more burnout. No statistical results were reported.

In one of the few Jones' studies to report both sample number and statistical results, Jones (1981b) cited his study of 38 nurses using the SBS-HP and an 11-item irrational beliefs scale based on the rational-emotive theory of Ellis (1974). He found that total irrational beliefs' scores were positively related to burnout (.45, $p < .05$). In further analysis, Jones determined that working in high

trauma jobs (i.e., critical care units and emergency rooms) was also positively associated with burnout (.42, $p < .05$). He further divided the sample into four groups: (a) low trauma/rational, (b) low trauma/irrational, (c) high trauma/rational, and (d) high trauma/irrational. The first three groups did not differ significantly on the SBS-HP, but the high trauma/irrational group differed significantly from the other three groups (directional t-test for independent sample means was used). Jones interpreted the results as indicating " . . . that self-defeating, irrational internal dialogue can facilitate burnout following exposure to stressful experiences at work" (p. 116). This interpretation is consistent with the adaptation-stressor combination in the present study.

In his only other study listing statistical results, Jones (1981c) examined the relationship between burnout and dishonesty to employee theft for 89 hospital workers. Using the Employee Burnout Scale and a dishonesty scale, Jones divided the sample into four groups: (a) low burnout/low dishonesty, (b) high burnout/low dishonesty, (c) low burnout/high dishonesty, and (d) high burnout/high dishonesty. Serious threat admissions on an anonymous basis were significantly higher than for the other three groups. There was no statistical difference among the other three groups. Apparently, burnout acts as a stimulus or arousal for those who are predisposed to stealing.

Jones (1981b, c) listed numerous other study results, but they were frequently run together and reported as trends. Significance levels are hard to interpret in his narrative reports of the results. The number of subjects as well as listings of any correlations are absent, and as a result these reports are not listed here. Again, the methods of reporting burnout research results detracts from more definitive statements being made. Jones has added to burnout research literature, but his results are limited by his reporting style as well as his burnout scales not being equivalent to that of Maslach with regard to factors.

Thus, it is very difficult to compare Jones' research with that of Maslach or other burnout researchers.

Other Burnout Research. As previously indicated, most burnout research has suffered from flaws in design and/or instrumentation. Three studies were selected for review which did not use the instrumentation of Maslach or Jones but did contribute to the development of the burnout construct. These studies are by Armstrong (1977) and Berkeley Planning Associates (1977), Chemiss (1980a), and Cummings and Nall (1983).

Armstrong (1977) and Berkeley Planning Associates (1977) both reported the same child abuse project study of 162 child abuse workers. Some strengths in the study were that workers were taken from 11 centers around the country, there was a 97% return rate for the questionnaires, and there was a strong comparison of burnout with job satisfaction. Unfortunately, the description of burnout was much more consistent with that of alienation than with burnout definitions of Maslach and Jones. In addition, the 30-item burnout scale developed for the study had not been reported in other studies. Comparisons of the study to other burnout research is then very limited, but the study did add to early burnout literature.

The Job Description Index (JDI), a frequently-used, reliable instrument, was used in the study as a measure of job satisfaction. The researchers report that, although there is a high correlation between job satisfaction and burnout ($-.58$, $p < .05$), when the two constructs are related to other personal and organizational factors, a clear difference emerges. They report supervisory personnel, employees working full time, and being younger as being more characteristic of burnout than work dissatisfaction. Organizational characteristics more highly associated with burnout than work dissatisfaction are

those of a wide span of control and centralization of decision-making at the program level, whereas the reverse is true of organizational complexity, poor peer cohesion, and inadequate supervision or staff support. In addition, inadequate communication, limited opportunities for innovative job behavior, and lack of clarity about rules and regulations are all more strongly associated with burnout than work dissatisfaction. The latter factors are consistent with the hypothesized impact of role ambiguity in the present study.

Armstrong (1977) and Berkeley Planning Associates (1977) report a result that is applicable to another stressor measure here--role overload. Their measure of role overload was client load, and a negative relationship was found (-.20, $p < .01$). The result was interpreted as indicating that the greater the client load, the higher degree of worker burnout. Upon further analysis, using partial correlations to factor out workers' perception of client load, they found that it was not the sheer number of clients that was important. Instead, client load only appeared to have a significant impact when a worker perceived that client load increase had exceeded the worker's resources for managing client load. Despite such contributions to burnout literature, the study has lacked replication as well as being different than any other study in its definition of the burnout construct.

Another early study contributing to burnout research is that of Chemiss (1980a). His longitudinal research was composed of 28 new professionals from four different occupational groups: public service lawyers, mental health workers, public health nurses, and high school teachers. The sample was studied via in-depth interviews over a 20 month period. It was the only longitudinal research study found in the literature. The results were published as part of a book in 1980, another non-traditional reporting method of burnout research.

In Chemiss' study, there was not a clear measure of burnout. Chemiss used two methods of assessing attitude change. The first of those was by professionals' self-report of change in attitude. His second method used three raters to rate statements from individual interview transcripts. Due to the unstructured nature of the interviews, about five percent of the statements were judged too ambiguous to rate, and some very basic attitude reports were missing from almost a third of the sample subjects. Chemiss does point out that the purpose of the study was exploratory, and the findings were judged to be starting points for further research.

Chemiss (1980a) used a narrative method of presenting his data and reporting trends. No statistical analysis was reported. He noted that new public professionals tend to lose their idealism while becoming less trusting and sympathetic toward their service recipients. New public professionals displayed reduced investment and commitment in their jobs. Frustrating or boring work environments tended to produce a more negative change in attitude than those who had stimulating and supportive jobs. Chemiss also identified a trend in new professionals to shift blame for failures from themselves to their clients or "the system." He interpreted the trend as one whose purpose was for self-protection of the new professionals' feelings of competence. Burnout was reported to be higher in the first year for those working under supervisors who were frequently unavailable and/or dictatorial and arbitrary.

As indicated, one of the study's values lies in its longitudinal nature. It also focused on four different groups and identified trends of new public professionals among them. However, it is limited due to lack of statistical analysis, no clear measure of burnout, and small sample size. Chemiss did accomplish his goal of providing an exploratory study that added to the existing literature.

In more recent research, Cummings and Nall (1983) used a questionnaire with 31 school counselors. The counselors represented 77.5% of those surveyed who were randomly selected from a list of approximately 300. To measure burnout, counselors were given a definition of burnout and asked their degrees of burnout based on a nine point, one-item continuum of "functioning at your peak capacity" to "severely burned out." The counselors were then asked to rate three factors (their jobs, selves, and clients) on two dimensions--evaluation (good-bad) and potency (strong-weak).

Correlations were used in data analysis. All correlations between burnout and the semantic descriptions of job, self, and clients were positively significant at the $p < .01$ level. In addition, the semantic rating differences between low and high burnout counselors were also significant but at the $p < .05$ level. Interpretations were given that the higher the level of burnout, the more negative meaning the counselors gave the descriptions of their jobs, selves, and clients and that the low burnout group gave significantly more positive ratings to their jobs, selves, and clients than the high burnout group. Results here are consistent with the theory and observation that a highly reported symptom of burnout is an individual's cynicism. However, the study suffers from a one-item rating of burnout, lacks in reliability due to misinterpretation and situational variables such as immediate mood and social approval.

Although the three studies have added to the burnout literature through use of a national sample, a longitudinal study, and statistical report of results, the lack of a reliable, valid measure of burnout renders their results as limited in impact. The Armstrong-Berkeley Planning Associates (1977) and Chemiss (1980a) studies do contribute to the foundation of the model used in the present study. Both place emphasis on the caregiver's perception of the situation as an adaptive factor in experiencing burnout. The former states that it is the child abuse

worker's perception of his/her resources not being sufficient rather than the actual number of clients, and Chemiss adds that perceptually his professionals changed from idealism to negativism when viewing their situations. The Cummings and Nall (1983) study also points to the global negative perception of negativism by those rating themselves as more burned out. Although limited in scope, the three studies did contribute as the Maslach and Jones' studies have.

Summary, Conclusions, and Theoretical Model

The following summary is for the purpose of building a foundation for the burnout model that is investigated in the present study. A basis for inclusion of each model variable is established and related to the model as a whole. Despite the limitations of existing research, there appears to be sufficient evidence to theoretically construct the proposed model.

Theoretical Job Stress-Burnout Model. The model (Figure 2.1) begins with a measure of adaptation to assess the pre-existing psychological resources that give an individual an adaptive capacity in his/her work environment. Variables of role ambiguity, conflict, and overload are next in the model and are measures of work environment potential stressors. The effectiveness of one's adaptation and perceived existence of the stressors contribute to the next variable which is job stress. The combination of adaptation, role ambiguity, role conflict, role overload, and job stress then predict the extent of burnout experienced.

Although the only research with the adaptation measure was the instrument's development, the works of Kobasa (1979) and Pines (1980) on psychological hardiness strongly support the inclusion of a measure of adaptive capacity in any stress research. The conclusions research from the review of adaptation-related and adaptation research are that an individual will experience

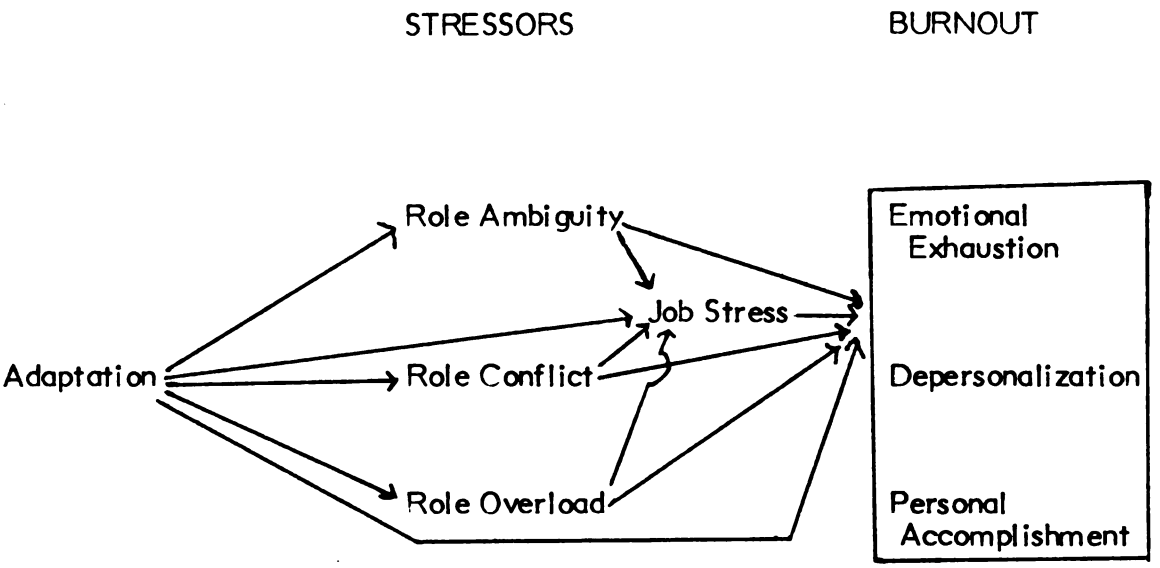

Figure 2.1. Relationships among adaptation, stressors, job stress, and burnout.

less stress if (a) the individual's perception is that there exist adequate internal and external resources to adapt to demands and that (b) the person perceives s/he has the capacity to respond in a flexible manner to match the requirements of the demand than if the individual does not hold such perceptions. An individual's level of adaptation would then affect his/her perception of role stressors, job stress, and burnout.

The role stressors of ambiguity, conflict, and overload have all been empirically related to job stress (Schuler et al., 1977; Beehr et al., 1976). They have also been repeatedly linked to burnout in the theoretical and anecdotal burnout literature (see Table 2.8). The absence of role stressor and job stress measures are surprising in their absence in the burnout research. Maslach and

Jackson (1978) and Gann (1979) have identified role ambiguity and conflict relationships in their research (lack of feedback from the job itself and lack of knowledge of results are related to burnout scales). Also, Barad (1979) and Chemiss (1980a) both found size of caseload (role overload) related to burnout. However, there has not been any attempt to find the relationships of stressors and job stress to burnout itself.

From the evidence for the inclusion of the five variables in burnout research and the lack of their inclusion in the existing research, the model of burnout was designed. The population of human services providers was selected based on the original intention that burnout is related to the providing of services to people. A description of the sample, measures, design, hypotheses, and analysis are the subjects of Chapter III.

CHAPTER III

METHODOLOGY

The purpose of the study was to investigate job stress and burnout with human services' employees. In the study, job stress and burnout were linked in a model for the first time in research and the model was examined for improvement. Described in Chapter III are (a) the sample, (b) measures, (c) procedures, (d) design, (e) research hypotheses, and (f) analysis.

Sample

The sample was comprised of all 231 human services' employees from 23 programs in a Midwestern community mental health center. The administered questionnaire was completed by 206 employees for an 89.2% completion rate. Programs ranged from 2 to 15 in size. To keep respondents anonymous, no individual program descriptions are given. Sample demographics are given in the following tables and summarized after their presentation.

The South Central Michigan mental health center employees who responded contained 125 females as compared to 81 males. As indicated in Table 3.1, the majority (88.3%) were Caucasian with a small number being black, Hispanic, and American Indian. Almost two-thirds were married with the remainder being divided fairly evenly between single and divorced. Over 60% of the respondents identified themselves as being in the 25-34 age range. Almost one-fourth reported themselves in the 35-44 age range, while there were almost seven percent in each of the 19-24 and 45-54 age ranges.

Table 3.1

Summary of Demographic Characteristics of Respondents to the Job Stress-Burnout Questionnaire

	N	%		N	%
Sex			Education		
Female	125	60.7	8th grade or less	1	0.5
Male	81	39.3	High school diploma	17	8.3
			Some college	22	10.7
Age			Associate degree/LPN	8	3.9
18 or less	1	0.5	BA, BS, RN	49	23.8
19-24	14	6.8	MA, MS, MSW	93	45.1
25-34	126	61.2	PhD, EdD, ThD, JD	12	5.8
35-44	48	23.3	Other	4	1.9
45-54	14	6.8			
55-64	3	1.5	Hours Worked/Week		
			70 or more	4	1.9
Race			60-69	8	3.9
Black	14	6.8	50-59	14	6.8
Mex.-Amer.	4	1.9	40-49	140	68.0
Amer. Indian	3	1.5	30-39	9	4.4
White,Caucas.	182	88.3	20-29	16	7.8
Other	3	1.5	20 or less	9	4.4
Marital Status			Income		
Single	38	18.4	Less than $5000	8	3.9
Married	133	64.6	5000-9999	17	8.3
Divorced	29	14.0	10,000-14,999	72	35.0
Other	6	2.9	15,000-19,999	80	38.8
			20,000-24,999	22	10.7
			25,000 or more	7	3.4

As a sample, respondents were a well educated group with only 18 of the 206 not having at least some college education. Over 45% indicated they had Master's degrees, whereas almost one-fourth had Bachelor's degrees. About six percent of the sample had obtained doctorate degrees. Of the respondents, 38.8% indicated a yearly income of $15,000-19,999, and 35% reported an income of $10,000-14,999. Slightly over 14% identified themselves as having an income over $20,000 a year.

Most respondents were employed full-time, with 83.5% working at least 40 hours a week. One in eight reported working 50 or more hours a week, whereas less than five percent worked less than 20 hours weekly. Most identified themselves as having expertise as clinicians (53.3%) with the remainder being fairly evenly distributed between administrators, supervisors, paraprofessionals, secretaries, and other. Of the respondents, 34.5% reported a job title of mental health therapist. No other job title appeared frequently, with 39 different titles being reported for the remaining 145 employees.

Respondents' time at work was divided into direct contact with service recipients, time with other staff, training, and paperwork. A majority of their time was spent in direct contact with recipients (51.5%), whereas about 30% was spent in contact with other staff. About one-fourth of their time was spent on paperwork and almost six percent in professional training.

The sample tended to be an experienced one, having spent an average of 6.9 years in the human services' area. Mean time in their present organizations was 4.4 years, with a mean of 3.4 years at their current positions. Many of them identified a difference between what they did on their jobs and what their actual abilities were. The largest number indicated a slight to moderate difference here.

Data Collection

Approval for administration of the questionnaires was first received from the mental health center's clinical and evaluation directors as well as an employee relations representative. A memo signed by the two directors and employee relations representative was then sent to program administrators and supervisors. The memo contained a statement of their support for the research and a request for cooperation in data collection (see Appendix A). After the

above approval, the research was also approved by Michigan State University's Committee on Research Involving Human Subjects (see Appendix B).

Questionnaires were administered and completed at program staff meetings. Completion of the questionnaires was voluntary and no names or identifying information was requested. An explanation of the confidentiality and feedback to the personnel department was provided with the questionnaire. The questionnaire was administered to 231 employees and returned by 206 for an 89.2% completion rate.

Measures

The scales were placed into four different groups: adaptation (A), role stressors, (R), job stress (S), and burnout (B). They were arranged in five different orders (ARSB, RASB, RSAB, RSBA, and SARB) and distributed so that an employee sitting next to another employee would not have the same form. This procedure was used to assure individual response patterns. No differences were found on the scales related to order of scale presentation. In addition, a social desirability scale was randomly embedded within the job stress scale as a method of checking for an individual's tendencies toward social approval which might change his/her response pattern. Role stressors were divided into three scales: role ambiguity, role conflict, and role overload. The burnout measure was composed of three subscales: emotional exhaustion, depersonalization, and personal accomplishment. The questionnaire is presented in Appendix C. A description of the scales follows.

Adaptation. Adaptation was defined as the capacity to maintain flexibility in meeting environmental demands as well as gratifying internal needs. The measure of adaptation was a 69 item survey developed by Hall (1977), entitled Survey of Actualization: Adaptation (SAA). It was rated on a four-point

scale (never, sometimes, frequently, always). Items stated negatively were reverse scored. The rating for each item was summed to give a single adaptation score. Hall (1977) reported a Cronbach coefficient alpha estimate of internal consistency of .91 with 222 subjects. The Cronbach coefficient alpha for the present study of 206 was also .91.

Role Ambiguity. Role ambiguity was defined as lack of role expectations and degree of uncertainty regarding the outcome of one's role performance. The measure was composed of six items that were rated on a four-point scale (strongly disagree, disagree, agree, strongly agree). All six items were reverse scored so that a high score was indicative of high role ambiguity. The items were added to yield a single role ambiguity score. Schuler et al. (1977) reported eight samples with internal consistency reliabilities ranging from .63 to .87. Six of the eight samples had internal consistency reliabilities between .78 and .87. Using Cronbach's coefficient alpha estimate of internal consistency, an internal consistency reliability of .82 was obtained for the current sample.

Role Conflict. Role conflict was described as the degree of incongruity of expectations associated with a role. Eight items composed the role conflict measure. Each was rated on a four-point scale (strongly disagree, disagree, agree, strongly agree). The items were summed to yield a single role conflict score. Eight samples with internal consistency reliabilities ranging from .55 to .82 were reported by Schuler et al. (1977). Six had internal consistency reliabilities between .71 and .82. For the present research, the internal consistency reliability estimate was .82.

Role Overload. Defined as having too much work to do in the time available, role overload was measured by three items. Beehr et al. (1976)

reported a reliability of .56 as estimated by the Spearman-Brown prophecy formula to the median interim correlation. The items were rated on a four-point scale (strongly disagree, disagree, agree, strongly agree). The items were summed to yield a single role overload score. Obtained with the current sample was a Cronbach alpha reliability of .62.

Job Stress. Job stress was defined as the reaction or strain produced from work-related stressors. The 18-item scale included measures of uneasiness, general fatigue, somatic tension, and job-induced anxiety. Schuler et al. (1977) reported that the scale was a slightly revised version of that developed by House and Rizzo (1972). Cronbach alpha internal consistency reliabilities of .82 and .70 were reported for two samples (Schuler et al., 1977). The items were rated on a four-point scale (strongly disagree, disagree, agree, strongly agree). An item stated positively was reverse scored. Items were summed to yield a single job stress score. A Cronbach alpha of .86 was obtained for the present study.

Social Desirability. Since many items on the burnout scale may be described as being contrary to professional ideals, the scale was subject to distortion by a social responsibility response set. Maslach and Jackson (1981) have previously reported using the Crowne-Marlowe Social Desirability Scale (SD) (Crowne & Marlowe, 1964) with the Maslach Burnout Inventory (MBI). None of the relationships between the SD and MBI subscales reached significance.

To assess the influence of social desirability in the present study, a short social desirability scale was randomly embedded among the job stress items. The scale was developed by Greenwald and Satow (1970) by combining the Marlowe-Crowne and other social desirability items. Formulation of the scale was determined by ranking Likert item-total correlations and finally pairing each positively-keyed item with a negatively-keyed item of corresponding rank.

Beginning with the highest positive-negative pair, the authors then actually developed 19 different social desirability scales ranging from 2 to 38 items. Each pair was correlated with the total of 38 so that a researcher could select any of the 19 scales with a knowledge of its relationship to the total.

For the present research, a scale of 22 items was selected which achieved a Pearson's product correlation of r = .96 with the total scale of 38 items. In addition, combined with the job stress scale, the questionnaire scale came to 40 items. As with the job stress scale, the items were rated on a four-point scale (strongly disagree, disagree, agree, strongly agree). The 11 items that were stated negatively were reverse scored. Items were then summed to give a single social desirability score. The obtained Cronbach alpha reliability estimate for internal consistency with the present sample was .95. In addition, when compared with the burnout score used as the dependent variable here, the social desirability-burnout correlation of -.07 did not reach significance.

Burnout. Burnout was defined as syndrome of emotional exhaustion, cynicism, and negative self-evaluation. The Maslach Burnout Inventory (MBI) was used to assess burnout. The MBI was composed of 22 items and three subscales: emotional exhaustion (nine items), depersonalization (five items), and personal accomplishment (eight items). A fourth subscale, personal involvement, contains three items and has been dropped as a regular subscale in the MBI due to the eigenvalue being less than unity. Therefore, these three items (3, 4, 6) in the MBI were dropped in the analysis.

Each MBI item was rated for frequency and intensity. The frequency rating was based on a seven-point scale (never, a few times a year, monthly, a few times a month, weekly, a few times a week, daily). Intensity rating was based on a range of eight choices which were anchored at four points (never,

very mild, moderate, very strong). For the test of the burnout model using burnout as a global measure, the burnout score was the sum of all 22 items rated for frequency plus the sum of all 22 items rated for intensity. When frequency or intensity were used separately, the respective choice was summed over the 22 items. The subscales were scored by summing the items on both frequency and intensity. Personal accomplishment was always reverse scored when summed with other subscales.

Although previous research with the MBI has focused on the subscales which are then broken down into frequency and intensity scores, Golembiewski and Munzenrider (1981) argue using the MBI as a total score does " . . . not distort the intent or sense of the instrument" (p. 229). In their quality of work life study with 296 respondents, they compared three methods of scoring the MBI with 22 worksite descriptors and concluded, "Direct addition of scores on all MBI items constitutes the simplest approach to estimating burnout, and that approach does not violate expectations concerning a panel of 22 covariants" (p. 230). the selection of a total score approach to measuring burnout was based on the research and recommendations on a conservative method of selecting path analysis variables (Young, 1977).

Maslach and Jackson (1981a) reported means and standard deviations, Cronbach's coefficient alpha internal consistency, and test-retest reliability coefficients, respectively (see Tables 3.2, 3.3, and 3.4).

Table 3.2

Means and Standard Deviations--
Maslach Burnout Inventory Subscales

Means and Standard Deviations	MBI Subscales: Emotional Exhaustion	Deperson.	Personal Accomplish.
Frequency (n = 1400)			
M	24.08	9.40	36.01
SD	11.88	6.90	6.93
Intensity (n = 1936)			
M	31.68	11.71	39.70
SD	13.84	8.09	7.68

(from Maslach & Jackson, 1981a)

Table 3.3

Reliability Coefficients--
Maslach Burnout Inventory Subscales

MBI Subscale	Freq.	Inten.	Standard Error of Measurement: Freq.	Inten.
Emotional Exhaustion	.90	.87	3.80	4.99
Depersonalization	.79	.76	3.16	3.96
Personal Accomplishment	.71	.73	3.73	3.99

n = 1316 for frequency
n = 1789 for intensity

(from Maslach & Jackson, 1981a)

Table 3.4

Test-Retest Reliability Coefficients--
Maslach Burnout Inventory Subscales*

MBI Subscale	Frequency	Intensity	p
Emotional Exhaustion	.82	.53	.001
Depersonalization	.60	.69	.001
Personal Accomplishment	.80	.68	.001

n = 53 (graduate students in social welfare and health agency administrators)

*test-retest interval was 2-4 weeks.

(from Maslach & Jackson, 1981a)

In addition, Iwanicki and Schwab (1981) reported a cross validation study of the MBI using 469 Massachusetts teachers randomly selected from the active membership list of the Massachusetts Teachers' Association. Their factor analysis and alpha coefficients were close to those reported by Maslach and Jackson (1981), and they concluded that the MBI was sufficiently construct valid to be used with both the helping professions and teachers.

An added contribution from their study supported the use of combining the frequency and intensity dimensions. They reported correlations between frequency and intensity dimensions across subscales ranging from .75 to .94 with a mean of .87. Iwanicki and Schwab (1981) also reported an average total variance in common between frequency and intensity scores on a subscale of 76% compared to only 31% reported by Maslach and Jackson (1981).

No published report of internal consistency reliability was found for the burnout total score, but it was estimated to be .90 in the present study. Coefficient alphas for intensity and frequency total scores were .83 and .81,

respectively for the present sample. A report of the subscale reliability coefficients obtained in the present research is given in Table 3.5.

Table 3.5

Internal Consistency Reliability Coefficients in Current Study--
Maslach Burnout Inventory Subscales

MBI Subscale	Frequency	Intensity	Total Score
Emotional Exhaustion	.88	.85	.92
Depersonalization	.76	.76	.87
Personal Accomplishment	.73	.76	.85

$n = 206$

Design

The design of the study was divided into two parts: (a) examination of the relationships between a measure of job stress and burnout with its various subscales and (b) the development and assessment of a theoretical framework from which a plausible job stress-burnout model could be devised and statistically tested. As indicated in the literature review, no research studies were found comparing job stress and burnout. The first part of the design was correlational, examining both the relationships between job stress and the subscales as well as the frequency-intensity dimensions of burnout. Comparisons were then made between the job stress-burnout correlations with regard to their respective strengths.

In the second part of the design, a causal model of job stress-burnout was constructed based on existing theory and research. The role of theory in constructing a causal model should not be underestimated in its importance. Hanson (1958) has stated that

> Causes are connected with effects; but this is because our theories connect them, not because the world is held together by cosmic glue. The world may be glued together by imponderables, but that is irrelevant for understanding causal explanation. The notions behind "the cause X" and "the effect Y" are intelligible only against a pattern of theory, namely one which puts guarantees on inferences from X to Y. Such guarantees distinguish truly causal sequences from mere coincidences. (p. 64)

The causal model posited in the present study from a theoretical position is the impetus for determining the type of data collected and analysis method.

Construction of a strong theory becomes paramount in the usefulness of any causal model. In any constructed model, there will be varying degrees of confidence by the researcher in the selection of relevant variables and their respective influences on dependent variables. There is also the recognition that, in actuality, the postulated relationships are selected from a complex pool of multiple relationships.

With the above knowledge as a foundation, the causal model of job stress-burnout was designed and path analysis selected as the method for analysis. Path analysis is used for assessing patterns of causation among a set of variables through the decomposition and interpretation of their linear relationships. Employed within the method are the assumptions that causal order and causal closure exist while ignoring measurement errors and sampling problems. It follows then that an advantage of applying path analysis to survey data such as in the current research is that it forces assumed causal relationships of selected variables to be made explicit within the path model. Although the method does not provide proof of a causal relationship, it does provide a foundation for analyzing if causality can be logically inferred to exist (Nie et al., 1975). A more explicit description of path analysis exists in the analysis section of the present chapter.

Research Hypotheses

There were five hypotheses to be tested for the correctional portion of the design. Hypotheses 4 and 5 had two parts. The second part of the design was not a hypothesis but, rather, a prediction that the proposed model would fit the data.

Correlational Hypotheses. The following hypotheses relate to various predicted relationships between job stress and burnout. They are presented first in null hypothesis form and then in alternative form.

Hypothesis 1

Null 1: No correlation will be found between the measures of job stress and frequency of feelings for burnout.

Alternative 1: A positive correlation will be found between the measures of job stress and frequency of feelings for burnout.

Hypothesis 2

Null 2: No correlation will be found between the measures of job stress and intensity of feelings for burnout.

Alternative 2: A positive correlation will be found between the measures of job stress and intensity of feelings for burnout.

Hypothesis 3

Null 3: No difference will be found between the job stress-frequency of feelings for burnout measures correlation, and the job stress-intensity of feelings for burnout measures correlation.

Alternative 3: The correlation for job stress-frequency of feelings for burnout measures will be positive and higher than the correlation for job stress-intensity of feelings for burnout measures.

Hypothesis 4

Null 4A: No difference will be found between the job stress-emotional exhaustion burnout subscale measures correlation, and the job stress-depersonalization burnout subscale measures correlation using the frequency of feelings burnout dimension.

Alternative 4A: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and depersonalization burnout subscale using the frequency of feelings burnout dimension.

Null 4B: No difference will be found between the job stress-emotional exhaustion burnout subscale measures correlation, and the job stress-personal accomplishment burnout subscale measures correlation using the frequency of feelings burnout dimension.

Alternative 4B: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and personal accomplishment burnout subscale using the frequency of feelings burnout dimension.

Hypothesis 5

Null 5A: No difference will be found between the job stress-emotional exhaustion burnout subscale measures correlation and the job stress-depersonalization burnout subscale measures correlation using the intensity of feelings burnout dimension.

Alternative 5A: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and depersonalization burnout subscale using the intensity of feelings burnout dimension.

Null 5B: No difference will be found between the job stress-emotional exhaustion burnout subscale measures correlation, and the job stress-personal accomplishment burnout subscale measures correlation using the intensity of feelings burnout dimension.

Alternative 5B: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and personal accomplishment burnout subscale using the intensity of feelings burnout dimension.

Model Proposal

The proposed job stress-burnout model contains six selected variables and is termed a just-identified model due to the number of equations being equal to the number of parameters estimated. As a result the full model has zero degrees of freedom and cannot be tested. However, the paths in the model can be tested and a model reconstructed based on interpretation of results. The proposal then is that the reconstructed model will fit the data collected in the study.

Analysis

The analysis section has been divided into four sections due to the specialization of the path analysis method. In the first section, the correlational analyses used to test the five research hypotheses is defined. In the next three sections path analysis method is explained. An initial description of path analysis is given to provide an understanding for the method selection and its applications. Next the LISREL used to analyze the data is described as it pertains to its use with the present model. An additional section for supplemental analysis was added to examine other variables for future research.

Correlational Analyses. As in all other analyses in the present study, the sample was treated as a whole of 206 subjects. The correlational analysis used here to examine the relationships between job stress and various subscales or dimensions of burnout. Within the job stress and burnout literature, two terms have been used frequently as synonymous, although no research exists to support such an interchange of terms. Hypotheses 1 and 2 were presented to examine the relationship between job stress and the two dimensions of burnout (frequency and intensity). To test Hypotheses 1 and 2, a t-test for significance of r was used as one-tailed since the positive direction was predicted (Glass & Stanley, 1970).

The relationships between job stress and the burnout subscales are compared for both dimensions of frequency and intensity of feeling as well as the dimensions themselves. In Hypothesis 3, the correlations between job stress and the two dimensions of burnout are compared. From the theoretical literature, the continual experience of job stress has been reported as more consistently related to burnout than the intensity of job stress. Consequently, the prediction here is that job stress would be more highly correlated with frequency of burnout feelings than intensity of burnout feelings. To assess the difference, a t-test for

significance of difference between dependent rs (one-tailed) was used (Cohen & Cohen, 1975). An assumption of the test is that the variances of the burnout scales and dimensions are equal. "Fortunately, the available evidence suggests that even fairly substantial departure from the assumptions will frequently result in little error of inference when the data are treated as if the assumptions were valid" (Cohen & Cohen, 1975, p. 48).

The same test of significance was used for Hypotheses 4 and 5 where the subscales themselves were compared. It was predicted that the emotional exhaustion subscale would correlate more highly with job stress than either of the two other subscales. This prediction was based on three factors: (a) definitions of job stress and emotional exhaustion being more theoretically consistent, (b) emotional exhaustion accounting for a greater portion of variance in the MBI (56.2% frequency, 55.4% intensity) than depersonalization (11.5% frequency, 10.3% intensity) or personal accomplishment (26.8% frequency, 28.5% intensity) according to Maslach and Jackson (1979a), and (c) that the theoretical prediction of burnout stages--emotional exhaustion and job stress--tend to be tied together as a continuum whereas depersonalization occurs as a coping mechanism and loss of personal accomplishment appears to be an outcome. The comparisons of correlations were tested for both frequency (Hypothesis 4) and intensity (Hypothesis 5) dimensions. All five hypotheses were presented in the traditional format of testing hypotheses, whereas the following three sections deal with a method of causal model assessment through path analysis.

Path Analysis. As a method of assessing causal models, path analysis is used to study the direct and indirect effects of variables hypothesized within the model as causes of dependent variables. The method uses the decomposition and interpretation of proposed linear relationships in a set of variables where it is

assumed that a weak causal relationship among variables exists and the relationships are causally closed (Nie et al., 1975). An attractive advantage of path analysis is that when applied to causal models, it illustrates an entire system of relationships between a number of variables that may function as dependent variables in some relationships and independent variables in others. The relationships' causal directions are determined by the theory or theories upon which the proposed model is founded. Again, path analysis is not a method for determining causality but, rather, a procedure applied to a causal model containing the set of assumptions generated by the researcher which is based upon logic, knowledge, and theoretical foundations. When discussing the assumed causal paths in the model, the originator of path analysis, Sewall Wright (1934), wrote:

> . . . the method of path coefficients is not intended to accomplish the impossible task of deducing causal relations from the values of the correlation coefficients. It is in tended to combine the quantitative information given by the correlations with such qualitative information as may be at hand on causal relations to give a quantitative interpretation. (p. 193)

The most common method of presenting a hypothesized model is through a path diagram as in the present study (see Figure 3.1). In the path diagram, a one-way arrow indicates the direction of causality assumed between the determining (independent) variable and the dependent variable. Since the causal flow in the model is unidirectional, it is called a recursive model. Within the model two types of variables exist. The first of these is termed an exogenous variable and is one which never acts as a dependent variable within the model. It is assumed that the variability for exogenous variables are determined by sources outside the model and thus are not explored within the context of the hypothesized model. In the current model the variable of adaptation is an exogenous variable. The second type of variable is termed endogenous, and its variations are assumed

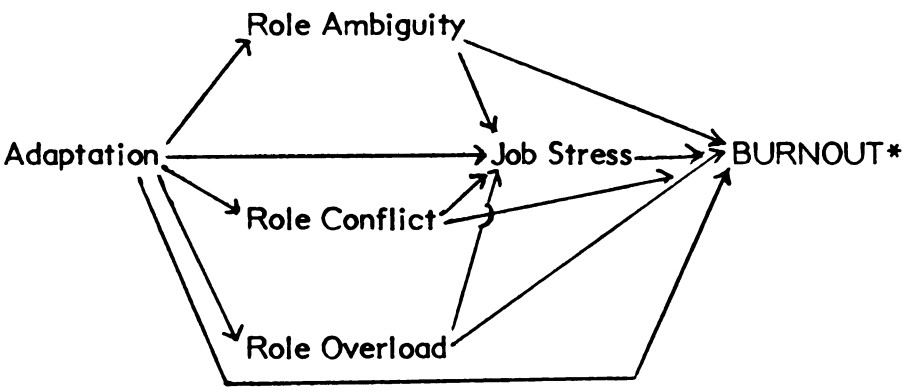

Figure 3.1. Relationships among adaptation, stressors, job stress, and burnout.

*Figure 3.1 is modified from Figure 2.1 because burnout subscales are not assessed in the model.

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to be explained within the model by exogenous or other endogenous variables. Role ambiguity, role conflict, role overload, job stress, and burnout are all assumed to be endogenous within the model presented.

Pedhazur (1982) has listed five assumptions that are fundamental to any application of path analysis.

1. The relations among variables in the model are linear, additive, and causal. Consequently, curvilinear, multiplicative, or interactive relations are excluded.

2. Each residual is not correlated with the variables that precede it in the model.

3. There is a one-way causal flow in the system. That is, reciprocal causation between variables is ruled out.

4. Variables are measured on an interval scale.

5. Variables are measured without error. (p. 582)

Path analysis, then, is a special type of multivariate analysis in which the solution becomes one or more multiple linear regression analysis.

Within the model, the arrows connecting the variables are referred to as path coefficients and are indicators of the direct effect of a causal variable upon a variable that is an effect (dependent). It is assumed that the degree of influence can be quantitatively represented as a path coefficient which is a standardized regression coefficient (beta weight). A path coefficient is calculated for each causal arrow in a path diagram. Through path coefficients, the change in the dependent variable, in standard deviations, is reported. The change is for one standard deviation change in the independent variable after all other independent variables with direct causal influence on the dependent variables have been controlled or held constant.

Based upon how the model is proposed and the causal paths drawn, models are divided into three groups: just-identified, overidentified, and underidentified. Underidentified models are not dealt with in the present study as they contain insufficient information for a specific solution--that is, they can have an infinite number of solutions. As previously mentioned in the hypothesis portion of the present chapter, both just-identified and overidentified models are a part of the current research. A just-identified model has an equal number of equations and parameters to be estimated. As a result, the degrees of freedom are zero and the full model cannot be tested. However, each of the path coefficients can be tested, and those not reaching significance can be eliminated. When paths are deleted as a result of lack of significance and/or meaningfulness, the process is termed theory trimming.

The test of significance used in theory trimming or path deletion for the present study is that of beta-standard error comparison. The method was suggested by Joreskog and Sorbom (1978). Standard error of beta weights (SE)

are compared to beta weights (B). If 2SE > B, the path is deleted from the model. One should remember that testing individual beta weights does not constitute testing a path model. It simply is a test and a decision about the significance of that particular causal path as to its continued inclusion in the proposed model.

Theory trimming to reconstruct a causal model leads to a multistage model building process. The reconstructed model, if paths have been deleted, becomes an overidentified model. Such a model has more equations than are required for the purpose of parameter estimation (Pedhazur, 1982). In the overidentified model, the path coefficients that have been deleted or did not reach significance are assumed to equal zero. A full, overidentified model can then be tested as to how well it fits the data collected.

The test used to ascribe the goodness of fit of the model to the data is the chi square. A significant chi square calls for a rejection of the null hypothesis. That is, the model does not fit the data. To assume that the model fits the data, the probability cannot reach significance. It is assumed that the greater the probability that is associated with a chi square, the better the model fits the data (Pedhazur, 1982).

Linear Structural Relations (LISREL). For testing the path model hypothesized in the current study, the LISREL computer program developed by Joreskog and Sorbom (1978) was used. Standing for Linear Structural Relations, LISREL is a method for analyzing multivariate path data and is based on maximum-likelihood (ML) estimation theory. Mulaik (1972) describes ML as the following.

> The idea of a maximum-likelihood estimator is this: We assume that we know the general form of the population distribution from which a sample is drawn. For example, we might assume the population distribution is a multivariate normal distribution. But

> what we do not know are the population parameters which give this distribution a particular form among all possible multivariate normal distributions. In the absence of such knowledge, however, we can take arbitrary values and treat them **as if** they were the population parameters and ask ourselves what is the **likelihood** . . . of observing certain values for the variables on a single observation drawn from such a population. If we have more than one observation, then we can ask what is the joint likelihood of obtaining such a sample of observation vectors? Finally we can ask: What values for the population parameters make the sample observations have the greatest joint likelihood? When we answer this question, we will take such values to be **maximum-likelihood estimators** of the population parameters. (p. 162)

Given the proposed linear structural model in the present research with its causal path coefficients represented by equations, LISREL provides an estimation of the unknown coefficients. The simultaneously solved equations each represent a causal link between variables which is a marked improvement over the identification of a bivariate relationship. Model testing will be done in two steps. Step one provides the researcher with a measure of the relative utility of the hypothesized paths as assessed through the beta-standard error comparison. Through the path coefficient assessment, a reconstructed model is proposed with any nonsignificant paths deleted. The resulting overidentified model is tested in the second step for overall goodness-of-fit with the data via the chi square distribution. Details of the significance testing were given in the preceding path analysis paragraphs.

Supplemental Analysis. With the recognition that any test of a model is merely the initial stage in the development of a fully descriptive model, additional data which have been related to job stress or burnout theoretically were gathered. A correlational analysis is used to identify bivariate relationships which demonstrate a potential for inclusion in future job stress-burnout research. These are presented in a table and briefly discussed.

Summary

Using a sample of 231 community mental health center employees with an 89.2% return rate, survey data related to a proposed model of job stress and burnout were collected. The variables within the model were represented by scales of adaptation, role ambiguity, role conflict, role overload, job stress, and burnout. The sample was described demographically and the internal consistencies of the scales were established.

Correlational and path analysis were conducted with the data. Hypotheses 1-5 were tested through correlational analyses with t-tests used to assess significance. The LISREL computer program used for evaluating path coefficients and models was used to examine the proposed job stress-burnout model. Non-significant paths were deleted using a beta-standard error comparison to identify significance. A full reconstructed model was then assessed using chi square for the significance test. The results of the above analyses are reported in Chapter IV.

CHAPTER IV

RESULTS

The purpose of the following chapter is to present the results of the hypotheses and the fit of the proposed model to the data as discussed in Chapter III. First, results of the five hypotheses are reported, followed by an assessment of the job stress-burnout model in its two-step format. Finally, a supplementary analysis is presented for the purpose of adding to future research suggestions in Chapter V. A summary of the results is provided in the last section of the chapter.

Hypothesis 1

> Null 1: No correlation will be found between the measures of job stress and frequency of feelings for burnout.
>
> Alternative 1: A positive correlation will be found between the measures of job stress and frequency of feelings for burnout.

A correlation of .57 was found. The null hypothesis of no correlation between job stress and frequency of feelings for burnout was rejected, t (204) = 9.89, $p < .01$. The alternative hypothesis of a positive correlation between the two measures was accepted.

Hypothesis 2

> Null 2: No correlation will be found between the measures of job stress and intensity of feelings for burnout.
>
> Alternative 2: A positive correlation will be found between the measures of job stress and intensity of feelings for burnout.

A correlation of .50 was found. The null hypothesis of no correlation between job stress and intensity of feelings for burnout was rejected, t (204) =

8.23, $p < .01$. Results support the alternative hypothesis of a positive relationship between the two measures.

Hypothesis 3

> Null 3: No difference will be found between the job stress-frequency of feelings for burnout measures correlation, and the job stress-intensity of feelings for burnout measures correlation.
>
> Alternative 3: The correlation for job stress-frequency of feelings for burnout measures will be positive and higher than the correlation for job stress-intensity of feelings for burnout measures.

The null hypothesis of no difference between job stress-frequency ($r = .57$) and job stress-intensity ($r = .50$) correlations was rejected, t (203) = 7.38, $p < .01$. There was support for the alternative hypothesis that the job stress-frequency correlation was higher than the job stress-intensity correlation.

Hypothesis 4

> Null 4A: No difference will be found between the job stress-emotional exhaustion burnout subscale measures' correlation and the job stress-depersonalization burnout subscale measures' correlation using the frequency of feelings burnout dimension.
>
> Alternative 4A: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and depersonalization burnout subscale using the frequency of feelings burnout dimension.

The null hypothesis of no correlational difference between job stress-emotional exhaustion ($r = .56$) and job stress-depersonalization ($r = .35$) using the frequency burnout dimension was not rejected, t (203) = 0.28, $p > .05$.

> Null 4B: No difference will be found between the job stress-emotional exhaustion burnout subscale measures' correlation and the job stress-personal accomplishment burnout subscale measures' correlation using the frequency of feelings burnout dimension.
>
> Alternative 4B: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and personal accomplishment burnout subscale using the frequency of feelings burnout dimension.

The null hypothesis of no correlational difference between job stress-emotional exhaustion ($r = .56$) and job stress-personal accomplishment ($r = .19$) using the frequency burnout dimension was rejected, t (203) = 7.58, $p < .01$. The result is supportive of the alternative hypothesis of a higher correlation between job stress-emotional exhaustion than between job stress-personal accomplishment with the burnout frequency dimension used.

Hypothesis 5

> Null 5A: No difference will be found between the job stress-emotional exhaustion burnout subscale measures' correlation and the job stress-depersonalization burnout subscale measures' correlation using the intensity of feelings burnout dimension.
>
> Alternative 5A: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and depersonalization burnout subscale using the intensity of feelings burnout dimension.

The null hypothesis of no correlational difference between job stress-emotional exhaustion ($r = .51$) and job stress-depersonalization ($r = .27$) using the intensity burnout dimension was not rejected, t (203) = 1.02, $p > .05$.

> Null 5B: No difference will be found between the job stress-emotional exhaustion burnout subscale measures' correlation and the job stress-personal accomplishment burnout subscale measure's correlation using the intensity of feelings burnout dimension.
>
> Alternative 5B: The correlation between the measures of job stress and emotional exhaustion burnout subscale will be higher than the correlation between the measures of job stress and personal accomplishment burnout subscale using the intensity of feelings burnout dimension.

The null hypothesis of no correlational difference between job stress-emotional exhaustion ($r = .57$) and job stress-personal accomplishment ($r = .12$) using the intensity burnout dimension was rejected, t (203) = 8.44, $p < .01$. The alternative hypothesis of a higher correlation between job stress-emotional exhaustion than between job stress-personal accomplishment with the burnout intensity dimension used was supported by the result.

Model Testing

The proposed job stress-burnout model was tested in a two-stage format. Stage one encompassed the theory trimming method in which path coefficients were tested for their individual significance. Secondly, the reconstructed overidentified model was assessed for overall goodness-of-fit to the data.

Theory Trimming. Theory trimming began with the proposed job stress-burnout model which was based on theory and previous research (see Figure 4.1). The path diagram presented contains both path coefficients and standard errors generated by the LISREL program. The figures are located along the causal paths with the standard errors being in parentheses. A method suggested by Joreskog and Sorbom (1978) was used to test the significance of the paths.

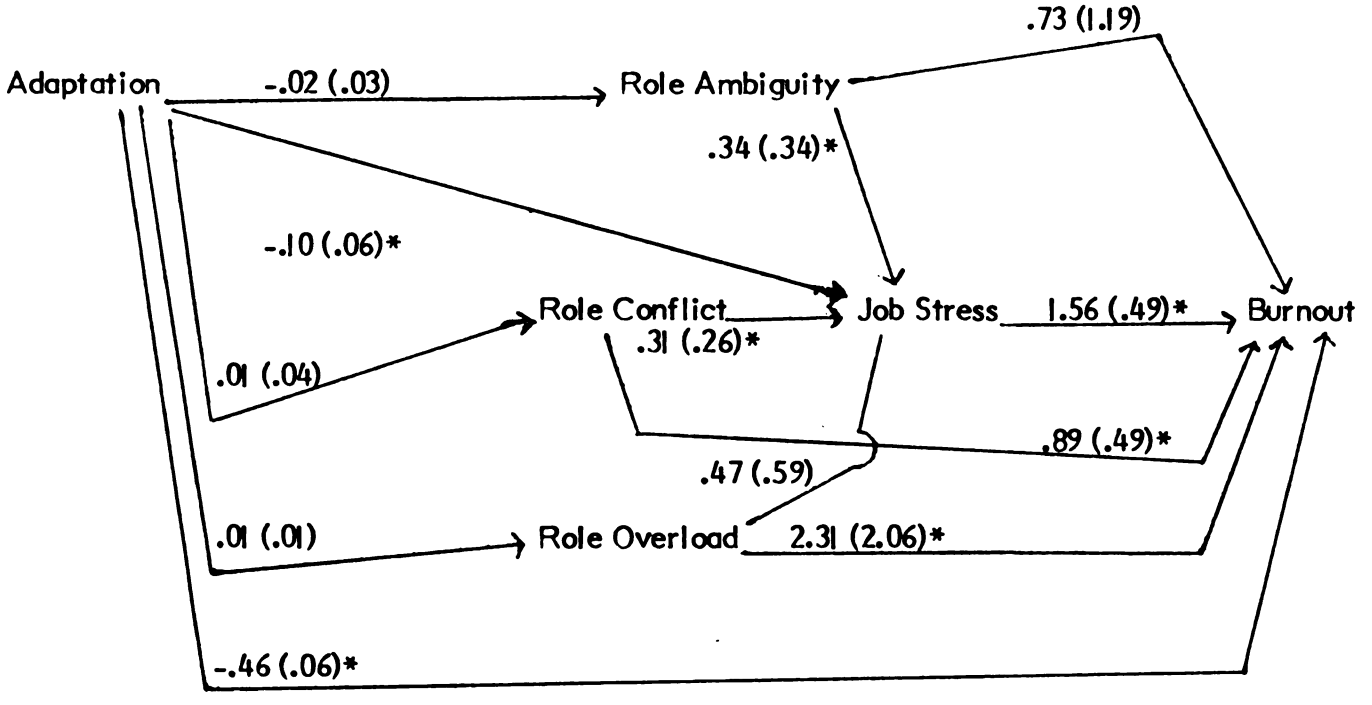


Figure 4.1. Relationships among adaptation, stressors, job stress, and burnout.

NOTE: The first values are path coefficients (beta weights) and the scores in parentheses are standard errors (SE)x2. 2SE are given due to their use in the significant testing. * = $p < .05$

The standard error of beta weights (SE) were compared to the beta weights (B). If 2 (SE)> B, then the path is deleted in the model.

Based on the theory trimming, five of the paths proposed were deleted. Three of the deleted paths were those related to the influence of adaptation on the three role stressors (role ambiguity, conflict, and overload). The other two deleted paths are those proposing the influence of role overload on job stress and role ambiguity on burnout. With the deletion of the adaptation paths to the role stressors, the three role stressors become exogenous variables in the reconstructed model along with adaptation. As previously indicated, a just-identified model cannot be tested as a whole since its degrees of freedom and chi square would both be zero. Consequently, a testable overidentified model was constructed based on the results of the theory trimming.

Table 4.1

Path Coefficients and Standard Errors in Job Stress Burnout Model Paths

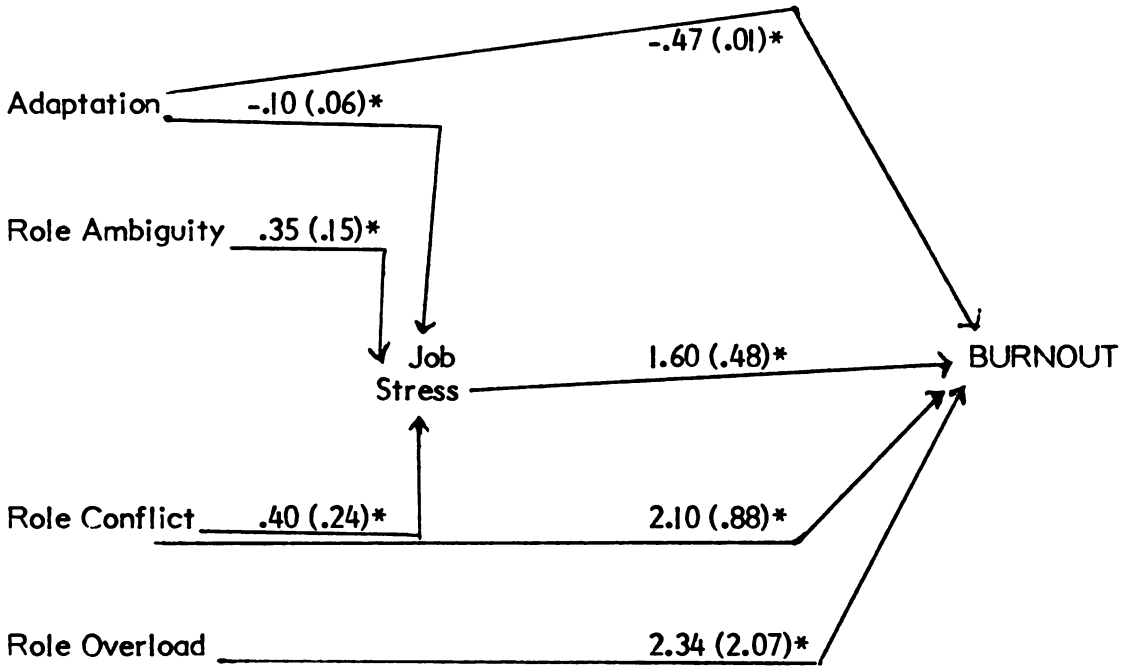
	Job Stress		Role Overload		Conflict		Role Ambiguity		Adaptation	
	Beta	±2SE	Beta	±2SE	Beta	±2SE	Beta	±2SE	Beta	±2SE
Burnout	1.56	±.49*	2.31	±2.06*	1.89	±.92*	.73	±1.19	-.46	±.06*
Job stress			.47	± .59	.31	±.26*	.34	±.34*	-.10	±.06*
Role overload									-.01	±.01
Role conflict									.01	±.04
Role ambiguity									-.02	±.03

* = $p < .05$, n = 206

NOTE: If the path coefficient |(B)| > 2SE, the path was considered significant and retained in the model.

Overidentified Model Testing. To arrive at the new model, the nonsignificant path coefficients were assumed to be zero and only the significant path coefficients were assessed within the model. The new model was presented as Figure 4.2 with the new path coefficients (beta weights) and (a) standard errors (in parentheses) included. As indicated in Table 4.2, all causal paths for the new model reached significance and were retained in the goodness-of-fit overidentified model testing.

In goodness-of-fit testing, the null hypothesis states that the overidentified job stress-burnout model restrictions did fit the data. A rejection of the null hypothesis implies the lack of fit, i.e., the data did not fit the model. The chi square for the present study was 4.05. Since the model has two degrees of freedom, the obtained chi square had a p-value of 0.123. Consequently, the null hypothesis was not rejected.



NOTE: The first scores are path coefficients (beta weights), and the scores in parentheses are (2) standard errors.

* = $p < .05$

Figure 4.2. Overidentified reconstructed model: relationships among adaptation, stressors, job stress, and burnout.

Table 4.2

Path Coefficients and Standard Errors
for Overidentified Model Paths

	B	2SE
Adaptation-job stress	-.10	.06
Role ambiguity-job stress	.35	.15
Role conflict-job stress	.40	.24
Adaptation-burnout	-.47	.01
Role conflict-burnout	2.10	.88
Role overload-burnout	2.34	2.07
Job stress-burnout	1.60	.48

n = 206

NOTE: All paths were significant. The significance rule for B and 2SE is $p < .05$ if B > 2SE with both B and 2SE considered as absolutes.

Supplementary Analysis

The supplementary analysis is presented first in the form of two tables (4.3 and 4.4). Table 4.3 contains the correlation matrix for variables contained within the job stress-burnout model. Table 4.4 presents the correlation matrix for model variables with variables that show potential for inclusion within the model for future research. Due to the size of the sample, a correlation of $\pm$ .12 reached a .05 level of significance. Since $\pm$ .12 accounts for less than 1.5% of the variance and $\pm$ .16 (correlation required for .01 level) accounts for better than 2.5% of the variance, a level of significance of .01 was selected for variables included in the latter table. The report of matrices is broken into seven sections. First, the matrix for model variables is presented. A brief section is then allotted for each model variable contained in Table 4.4.

Table 4.3

Correlation Matrix for Model Variables
with Internal Consistency Reliability

	J.S.	R.O.	R.C.	R.A.	A.	C.A.
Burnout	.56**	.40**	.46**	.36**	-.35**	.90
Job Stress		.27**	.30**	.29**	-.25**	.86
Role Overload			.49**	.27**	.11	.62
Role Conflict				.45**	.03	.82
Role Ambiguity					-.12*	.82
Adaptation						.91

N = 206
* = $p < .05$
** = $p < .001$

KEY: J.S. = Job Stress, R.O. = Role Overload, R.C. = Role Conflict,
R.A. = Role Ambiguity, A. = Adaptation
C.A. = Cronbach Alpha

Table 4.4

Correlation Matrix for Model Variables
with Potential Model Variables

	Burnout Total Score	Job Stress	Role Over-load	Role Con-flict	Role Ambi-guity	Adapta-tion
Income			.23**			
Difference between job and ability	.27**	.22**	.19*	.38**	.30**	
Changes outside job (six months)		.16*				
Job changes (six months)	.22**	.19*	.25**	.24**		
Organizational changes (six months)	.25**			.20*		
Supervisor support	-.24**		-.27**		-.33**	
Authority for decisions	-.20*		-.21**	-.31**	-.32**	
Improvement of average client		-.16*				.26**
Impairment of average client				.19*		
Hours worked per week		.18*				

N = 206, * = $p < .01$, ** = $p < .001$

Model Variable Matrix. For the purpose of comparison with the causal modeling process, the matrix involving the model variables is included. All model variables were correlated with job stress and burnout at the .001 level. It is noted, however, that despite significant bivariate relationships between role ambiguity and burnout as well as between role overload and job stress, these

relationships did not hold up under the multivariate causal analysis and were deleted from the model.

Within the proposed model, adaptation was the least developed in terms of previous research and its relation to the other variables. It was observed that the three paths deleted from the model between adaptation and role stressors had the lowest correlations among the variables. The association between adaptation and role ambiguity did reach significance at the .05 level, but with a correlation of -.12. A comparison between the bivariate and multivariate relationships supported the concept of increased strength for the path analysis over simple correlations in determining the likelihood of causal relationships. The comparison also pointed out the necessity of strong theory and previous research in developing causal models.

Burnout Variable. All variables associated with burnout and other model variables should be interpreted with caution as each was composed of only one item and no test-retest reliability information was available. Five additional variables were identified as being related to burnout. It was noted that all five variables had lower correlations with burnout than the existing model variables. However, it may still be possible for any or all of these variables to contribute to the job stress-burnout model.

The highest association was between burnout and the perceived difference between what a job allowed one to do and the individual's ability. As the difference increased, it was expected that one's overall experience of burnout would also increase. Both one's job changes and his/her organization's changes in the last six months were also related to burnout in a positive way. The other two variables were both associated with burnout in a negative manner. From the results, it was predicted that the greater amount of supervisor support one

received and the more authority one had to make decisions needed on the job, the less one would tend to experience burnout. Any or all of these variables could be included in future research with the appropriate theory and previous research considered thoroughly.

Job Stress. Five variables were identified as being related to job stress. Again, as with burnout, none of the potential variables was correlated as highly with job stress as were the model variables. In addition, the perceived difference between what the job allowed and one's ability was the variable most highly related to job stress. The next two variables both had to do with changes in the past six months. The first of these, as with burnout, was job changes that have occurred. However, the second type of change was different than burnout and related to changes occurring outside the job. The other two variables related to perceived improvement an average client was making and number of hours worked per week. Job stress was expected to increase as the number of hours worked per week increased and perceived client improvement decreased.

Role Overload. As with job stress and burnout, five variables reached the .01 level of correlation with role overload. Four of these related to role overload were also related to burnout: (a) the difference between one's job and ability, (b) job changes in the last six months, (c) a negative relationship with amount of supervisor support, and (d) a negative association with one's amount of authority to make job decisions. The variable uniquely related to role overload was that of income. As one's income rose, amount of overload also appeared to rise.

Role Ambiguity. All three variables related to role ambiguity were correlated $\pm$ .30 or better. These variables were also associated with burnout and role overload. A positive relationship existed between role ambiguity and

the difference between job and ability whereas negative relationships existed with supervisor support received and authority to make job decisions.

Adaptation. Unlike the other variables, adaptation was related to only one variable. The relationship was shared with job stress, but was in the opposite direction. As improvement in an average client was perceived to go up, one's score on the adaptation scale also tended to increase.

Summary

The results were reported in three sections. First, five hypotheses relating job stress to various components of burnout were tested. Next, a two-stage format was used in assessing a job stress-burnout model. Finally, a supplementary analysis was conducted to explore potentially new variables for the model. Research conclusions are presented in Chapter V.

Hypotheses 1 and 2 tested the relationships between job stress and the two burnout dimensions of frequency and intensity. A null hypothesis of no positive correlations between job stress and each dimension was rejected in both hypotheses. In Hypothesis 3, the strength of relationships between job stress and two dimensions was tested. A null hypothesis stating that there was no difference between the job stress-frequency and job stress-intensity correlations was rejected. The alternative hypothesis that the job stress-frequency correlation was higher than the job stress-intensity correlation was supported.

The next two hypotheses explored the strength of relationships between job stress and the burnout subscales using the two dimensions. Hypothesis 4 tested the strength of the relationships using frequency. Null Hypothesis 4A compared the job stress-emotional exhaustion relationship with that of job stress-depersonalization. The null hypothesis of no difference between the strength of these relationships was not rejected. Null Hypothesis 4B compared the strength

of the job stress-emotional exhaustion association with the strength of the job stress-personal accomplishment association. A null hypothesis of no difference was rejected.

Hypothesis 5 assessed the strength of job stress and burnout subscale relationships using intensity. In Null Hypothesis 5A, the job stress-emotional exhaustion relationship was compared with the job stress-depersonalization relationship. As with Hypothesis 5, Null Hypothesis 5A proposing no difference between strength of the two relationships was not rejected. Also, consistent with Hypothesis 4, Null Hypothesis 5B found no difference between strength of job stress-emotional exhaustion association and job stress-personal accomplishment association, and the hypothesis was rejected.

The second portion of the results reported an assessment of the proposed job stress-burnout model. In stage one, five causal paths in the model were deleted when they did not reach significance. An overidentified model was constructed based on the results and tested for goodness-of-fit to the data. A null hypothesis stating the new model did not fit the data and was rejected.

In the supplementary analysis, 10 variables were selected to be considered as potential additions to the job stress-burnout model based on a relationship of at least the .01 level of significance to one of the existing model variables. Four of the potential variables were more prominent than the other six by being related to at least three model variables. These four were (a) the difference between job and ability, (b) job changes in the past six months, (c) supervisor support, and (d) authority for job decisions. The four variables show potential for adding to the exisiting model and are discussed in Chapter V.

CHAPTER V

SUMMARY, CONCLUSIONS, AND DISCUSSION

Chapter V is divided into three sections. The first section presents a summary with conclusions drawn from the research results. Section two contains a discussion of the findings as they relate to previous theory and research. A discussion of limitations and possible generalizations is included. Finally, implications for future research to extend the job stress-burnout model are presented.

Conclusions

The purpose of the research was to investigate job stress and burnout with human services' employees. In the study, job stress and burnout were linked in a model for the first time. The relationship between job stress and the components of burnout were examined and a model with causal paths was constructed. Variables with the potential for inclusion in the model were identified. From the results, the following conclusions were drawn.

1. A positive relationship was found between job stress and the frequency of feelings for burnout dimension ($p < .01$) ($r = 56$).

2. A positive relationship was found between job stress and the intensity of feelings for burnout dimension ($p < .01$) ($r = 50$).

3. A higher positive correlation was found for the job stress-frequency of feelings for burnout relationship than for the job stress-intensity of feelings for burnout relationship ($p < .01$).

4. No difference was found between the job stress-emotional exhaustion burnout subscale measures' correlation and the job stress-depersonalization burnout subscale measures' correlation for either frequency or intensity of feelings for burnout ($p < .05$).

5. The correlation between job stress and the emotional exhaustion burnout subscale was found to be higher than the correlation between job stress and the personal accomplishment subscale for both frequency and intensity of feelings for burnout ($p < .01$).

6. Within the job stress-burnout model, the following seven causal paths were found to exist: adaptation---> job stress, adaptation---> burnout, role ambiguity---> job stress, role conflict---> job stress, role conflict---> burnout, role overload---> burnout, job stress---> burnout. A B-standard error comparison was used for theory trimming.

7. A reconstructed job stress-burnout model based on conclusion six results was found to fit the data (chi square, $p > .05$).

8. In the supplementary analysis, 10 variables showed some potential for inclusion in the model based upon at least a .01 level of significance with at least one of the six model variables. The following four showed the most potential based on being related to at least three model variables: (a) the perceptual difference between an employee's present job and perceived actual ability, (b) changes on the job in the past six months, (c) perceived supervisory support, and (d) perceived authority to make necessary decisions on the job.

In conclusion, the investigation of job stress and burnout components yielded several significant results. Job stress was positively related to both the frequency and intensity burnout dimensions, but the job stress-frequency relationship was stronger than the job stress-intensity relationship. There was no difference between the job stress-emotional exhaustion and job stress-depersonalization relationships, but personal accomplishment was less strongly related to job stress than emotional exhaustion. Goodness-of-fit was shown between the job stress-burnout model and the data with several potential variables identified for future research. The conclusions are discussed in the next section.

Discussion

The purpose of the preceding research was to link the occupational stress literature with that of burnout, investigate the relationship between job stress and burnout in research for the first time, and assess a job stress-burnout model

through causal analysis. After conducting the research and interpreting the results, it is apparent that the job stress-burnout phenomenon is clearly in an infant stage. Further discussion of the results is given below to examine the nature of the present results and possible explanations for them.

Job Stress and Burnout Dimensions. Hypotheses 1, 2, and 3 tested the relationships between job stress and the two burnout dimensions of frequency and intensity of feelings for burnout. A positive relationship between job stress and both dimensions was found with the job stress-frequency relationship being stronger than the job stress-intensity relationship. Maslach and Jackson (1981) have suggested that the dimension scores be kept separate as they do correlate with some variables separately. However, Golembiewski and Munzenrider (1981) argue that from research, the simplest and most conservative method is that of using a total score as in the present research.

It may then be argued that the model should have been divided into tests of job stress-frequency of burnout and job stress-intensity of burnout models. Such an approach was not used due to the selection of a more conservative choice. The division of burnout into divisions may be interesting conceptually, but it is viewed here as an artificial division. To acknowledge the existence of a burnout feeling for the purpose of assessing frequency, some degree of intensity must exist. The two dimensions then become inherently tied to one another.

At present, no research exists to explain the relationship between the dimensions other than showing some dissimilar correlates. It is unclear what intensity has to exist to be identified as a frequency or if one experiencing a greater intensity tends to perceive more situations as a frequency. Conversely, it is not apparent whether the experience of an increasing number of frequencies has a cumulative effect, thus creating more intense feelings. The suggestion

made here is that the two dimensions are an interrelated way of looking at the same experience. As such, they should be left combined in the service of meaningfulness despite the fact that they can be statistically separated. Further causal analysis can then benefit from the more conservative approach until the dimension division is more theoretically sound than it is at present.

Perceptual vs. Objective Data. In any survey research, the problem of distortions due to self-report needs to be addressed. Distortions due to social approval, secondary gain, or other rationale need to be controlled as much as possible, but are also a necessary part of the perceptual process. In the present study, a social desirability scale was included as one method of control with no relationship to burnout being discovered.

From the research done by the Berkeley Planning Associates (1977), the importance of self-report on overload was emphasized. The researchers indicated that child abuse case workers' case loads did not contribute to burnout until the case load number went beyond the case workers' perceived resources. It would appear that case workers' perceptions provided more relevant information than did objective case load numbers. Although objective data would be very valuable in future research, the qualitative perceptual input provided by the caretaker is extremely important in burnout research.

Job Stress and Burnout Subscales. Hypotheses 4 and 5 tested job stress-burnout subscale relationships. No difference was found between job stress and its relationships with emotional exhaustion and depersonalization. A difference was found between the job stress-emotional exhaustion correlation and the job stress-personal accomplishment correlation. As with the burnout dimensions, Maslach and Jackson (1981b) have argued for dividing the Maslach Burnout

Inventory (MBI) into its subscales based upon dissimilarities in some of their correlates.

The purpose of the current research was to examine the relationships between job stress and the MBI's subscales to add to existing research. However, there was a lack of sound theoretical foundations and research to divide the MBI in the proposed model. Again, following suggestions by Golembiewski and Munzenrider (1981) on the use of the total burnout score and that of Pedhazur (1982) on model building, the more conservative approach was taken. If Maslach and Jackson (1981b) or other researchers establish a clearer or sounder theoretical base for the relationship between the subscales and their division, future research could then explore the subscales within a job stress-burnout model.

Unidirectional vs. Transactional. One of the limitations in the use of path analysis is that it assumes unidirectional causality. In presenting a model of stress, Schuler (1985) presents a strong case for a transactional job stress model in organizations. He stated:

> Transactional indicates that the relationships shown in the model are not linear but rather reciprocal. Thus it is important to treat the components of the stress model as having multidirectional causation between them so that all components can be viewed as both causes and effects (Lazarus, 1978). Process refers to what happens over time and across stressors. It contains two elements: (1) the actual interchange between the person and the environment (full of potential stressors) and (2) the person's responses over time to the stress experienced. (p. 348)

A transactional, longitudinal study taking into account the complex interactions of stressors and coping responses would be both comprehensive and ideal. However, the lack of controls with regard to experimental design and statistical analysis techniques lend such a study beyond the scope of the present research. The research reported here was chosen to select a cross-section of

people at a particular time to begin as a building block of research in the construction of the foundation for understanding the job stress-burnout model. Its limitations regarding number of variables, unidirectional causation, and lack of longitudinal dimension are acknowledged along with its contribution to existing research.

Job Stress-Burnout Model. The causal model proposed and tested appeared to be sound in selection of model variables. None of the proposed variables was deleted. The significance of the causal paths suggests that the theory and logic were sound in the model's construction. However, despite the results, caution should be used in applying the model to other than human services' employees until research is conducted with other populations. There were five paths deleted and these are discussed in the following paragraphs.

Deletions which raise the most questions are those of all paths from adaptation to role stressors. As indicated in the previous chapter, the adaptation measure was the least developed and had only been researched in its initial development. The scale's intent was to measure how flexible one is in meeting environmental demands while still being capable of gratifying one's own internal needs (Hall, 1977). With its limited research, it is not clear what the adaptation scale is actually measuring. Although it contributed to the model by having causal paths to job stress and burnout, it was correlated to only one other measure--perception of improvement for the average client. It is possible that the measure fits more aptly under coping after stressors have been experienced. Future research may then test the model with adaptation placed after the three role stressors in the causal ordering to assess such a possibility. Further research with the scale may also clarify it as a construct which would help interpret the model for future research.

Another path deleted was from role ambiguity to burnout. As Spizcuzza and Devoe (1982) have reported, human services' employees tend to be placed continually in situations where uncertainty is placed on them. With experiences such as these, it may be possible that human services' employees are affected at the time by job stress; but due either to experience dealing with ambiguity or to learned coping mechanisms, this stress does not lead to a burnout effect. Since role ambiguity has been researched more thoroughly in business and industry than in human services, role ambiguity may be more predictive of excessive stress in business than in human services.

In contrast to role ambiguity, role overload maintained its path to burnout, but its path to job stress was deleted. Again, the results are consistent with the Berkeley Planning Associates' (1977) study which indicated that case load only seemed related to burnout after a case worker perceived the case load to go beyond his/her resources. There is also a possibility that the relationship between role overload and the job stress-burnout continuum may be curvilinear in nature. That is, up to a particular point, work load acts as a stimulus or challenge and beyond that point has a negative relationship. McGrath (1977) has suggested such a relationship exists and describes it as an inverted U-shaped function. He also discusses that it would be difficult to confirm due to lack of measures and control of the situations for testing it. More research is needed with role stressors, job stress, and burnout to clarify the relationships.

Implications for Future Research

Since burnout is a recently developed research construct, the potential and need for future research are unlimited. Based on the present research results and past job stress as well as burnout research, directions for research are suggested.

Research Design. No long-term studies exist that assess the job stress-burnout relationship. Cherniss (1980a) has done the only long-term (three year) burnout study and that consisted of only 28 subjects. Since the job stress-burnout relationship was predicted to be a continuum that had stages, certainly the assessment of a model over time would add to the literature. A combination of causal analysis and time series analysis would seem to identify if the model changes at different stages of job stress-burnout as well as identify if new variables contribute at different points in time.

Person-Environment Fit. Within the stress literature, Endler (1980) has recommended the need for identifying the effects of person-environment interactions. Pfifferling (1981) reported that research in occupational medicine has shown that 10% of workers experience 80% of illnesses. By studying the requirements of occupations and work site characteristics, it may be possible to identify environments that potentiate the job stress-burnout continuum.

In addition, research that may specify personality characteristics leading to vulnerability to job stress and burnout would contribute from the person side of the person-environment fit. Ultimately, researchers would be able to predict which employees under what particular circumstances are likely to experience job stress and burnout. Effective selection of employees to match job and work site characteristics could then be employed.

A match to a person's present job would appear to be important in light of the supplementary analysis findings. The variable that related to all model variables except adaptation was that of an employee's perceptual difference between job requirements and that person's actual ability. Little training is given to most managers or administrators on effective selection or job analysis to understand job components. An understanding of how well an applicant will

match the job requirements and continue to develop within that job would seem to be crucial as a preventative measure in reducing the possibility of the job stress-burnout continuum.

New Model Variables. In addition to the difference between job and ability, three other variables were associated with at least three model variables. It should be mentioned that all four of these measures were one-item measures and would need to be developed further if added to the model.

One of the assumptions of path analysis is that the measures have interval scale properties. Since using a one-item measure would increase the probability of non-interval properties, it would seem important to develop measures of new variables that contain a larger number of items than at present. Even though Billings and Wroten (1978) have suggested that the consequences of falsely assuming equal intervals are not severe, the purpose of causal modeling is to build the model with the most confidence in causal statements. Building stronger variable measures would be an important part of that process.

The other three potential variables are (a) perceived supervisor support, (b) authority to make job decisions, and (c) job changes in the past six months. The first two would appear to fit as moderators between role stressors and burnout since they were related to these but not to job stress. Training supervisors to give more support and delegate decision making with authority might also be a test of these variables on burnout.

Job changes in the past six months related to job stress, burnout, role conflict, and role overload. The job change variable, based on burnout and change management theory, may well be an exogenous variable that would come before the role stressors in the model. As with other variables, training

supervisors to manage change effectively may be used as a way of reducing job stress and burnout as well as being used as a moderator variable in the research.

A variable not included in the present study but frequently recommended for research in job stress and burnout is that of coping. Cherniss (1980b) proposed a stress-strain-burnout continuum and suggested that a point of intervention is between the stress-strain connection. Coping would seem to be an ideal variable as it also addresses the responses to stress mentioned by Schuler (1985) in the transactional model of stress. Perlman and Hartman (1979) point to coping as a key in job stress-burnout research due to its potential to alleviate or exacerbate a situation.

Coping is defined as effort to master conditions of harm, threat, or challenge when a routine or automatic response is not available (Monat & Lazarus, 1977). Cherniss (1980b) described the coping process in the following statement.

> Burnout involves a particular way of coping with job-related stress, one which emphasizes withdrawal, detachment, avoidance, lowering of goals, and blaming others. These are intrapsychic modes of coping with stress . . . . However, the burnout syndrome involves a clear choice to use intrapsychic defenses rather than active problem-solving methods. According to Lazarus and Launier, situations characterized by high ambiguity, conflict, and helplessness will favor the use of withdrawal and intrapsychic defenses. (pp. 47-48)

The nature of the coping variable in job stress-burnout research would be to act as a moderator between stressors and possibly job stress to prevent burnout. Research could identify if different coping mechanisms work better for job stress or burnout as well as pinpoint if different coping mechanisms are more effective in different stages of burnout. Combining coping with the person-environment fit, one may attempt to determine if a particular type of coping works more effectively with a specific environment or type of person.

Application of Future Research. Whatever the research that is conducted, it would be beneficial to transfer that research into actions within organizations. Organizations are placing an increasing emphasis on providing service to clients/customers as evidenced by the popularity of the book In Search of Excellence (Peters & Waterman, 1982). Meeting others' needs will place businesses more in the role of human service providers than at any time in history. Without a thorough understanding of the human side of service and business interactions, the consequences of such interactions will not be effective in reducing job stress and burnout. Even now some state worker compensation laws make employers liable for employees' mental and physical illnesses if those illnesses are a result of or worsened by any part of the employment (Beehr & Bhagat, 1985). Since all organizations are ultimately providers of human services, job stress-burnout research can play a critical role in both effective organizations and effectively living people.

APPENDICES

APPENDIX A

INTRODUCTORY LETTER FOR STUDY

COMMUNITY MENTAL HEALTH BOARD

CLINTON-EATON-INGHAM

MEMO

To: Program Directors **Date:** May 21, 1980

From: Stephen A. Bergeron, Employee Relations Representative
Gil DeRath, Clinical Director
Judith Taylor, Evaluation Director

Re: Bill Horst, Professional Psychology Intern

Mr. Bill Horst, a professional psychology intern at Ingham Community Mental Health Center, has requested permission to carry out his doctoral dissertation research at the Community Mental Health Board. Bill will be investigating the relationships among adaptation, job stress and burn out.

The proposed study will focus on staff having contact with clients, including clerical and secretarial personnel. Involvement of individual employees in the study will be voluntary and all data will be treated confidentially. Bill will share the results of this survey with programs through the Personnel Office.

In a time where increasing pressures are being experienced by all staff, it is especially relevant that we look at factors that may contribute to staff performance. Identifying and moderating job stress contributors, and thereby possibly reducing what is commonly called "burn out", may assist the Board in improving the productivity of employees, reducing absenteeism and turnover and improving employee satisfaction.

We wish to stress that we strongly support Bill in this research project. It is our hope you will also support this effort when Bill approaches you for your cooperation.

Bill will provide you with any necessary information concerning the study. We will be happy to discuss with you, from our perspective, the relevance of this study in improving the quality of work life for our employees and the potential for the improvement of the quality of service to our clients.

Please contact us if you have any questions.

skr

APPENDIX B

APPROVAL LETTER FROM

MSU'S HUMAN SUBJECTS COMMITTEE

MICHIGAN STATE UNIVERSITY

UNIVERSITY COMMITTEE ON RESEARCH INVOLVING
HUMAN SUBJECTS (UCRIHS)
238 ADMINISTRATION BUILDING
(517) 355-2186

EAST LANSING • MICHIGAN • 48824

June 3, 1980

Mr. William C. Horst
Counseling, Personnel Services

Dear Mr. Horst:

Subject: Proposal Entitled "The Relationship Among Adaptation, Stressors, Job Stress and Burnout: An Investigation of a Model"

The above referenced project was recently submitted for review to the UCRIHS.

We are pleased to advise that the rights and welfare of the human subjects appear to be adequately protected and the Committee, therefore, approved this project at its meeting on June 2, 1980.

Projects involving the use of human subjects must be reviewed at least annually. If you plan to continue this project beyond one year, please make provisions for obtaining appropriate UCRIHS approval prior to the anniversary date noted above.

Thank you for bringing this project to our attention. If we can be of any future help, please do not hesitate to let us know.

Sincerely,

Henry E. Bredeck
Chairman, UCRIHS

HEB/jms

cc: Dr. William W. Farquhar

APPENDIX C

QUESTIONNAIRE

DEMOGRAPHIC INFORMATION

Please check the response for each item that best describes you.

1. Sex:
   ____ Male
   ____ Female

2. Age:
   ____ 18 or less
   ____ 19-24
   ____ 25-34
   ____ 35-44
   ____ 45-54
   ____ 55-64
   ____ 65 or more

(Check only one group)

3. Race:
   ____ BLACK
   ____ LATINO, MEXICAN-AMER.
   ____ AMERICAN INDIAN
   ____ WHITE, CAUCASIAN
   ____ OTHER:_____

4. Marital Status:
   ____ SINGLE
   ____ MARRIED
   ____ DIVORCED
   ____ WIDOWED
   ____ OTHER:_____

5. If married, for how long have you been married to your current spouse?
   ____ Years

6. If you have children, how many of them are now living with you?
   ____ CHILDREN LIVE WITH ME
   ____ I HAVE NO CHILDREN

7. Education: (check highest completed)
   ____ 8th grade or less
   ____ some high school
   ____ high school diploma
   ____ some college
   ____ Associate degree or L.P.N.
   ____ B.A., B.S., R.N.
   ____ M.A., M.S., M.S.W.
   ____ Ph.D., Ed.D., Th.D., J.D.
   ____ Other:_____

8. How long have you worked in this organization?
   ____ YEARS

9. How long have you worked at your present position?
   ____ YEARS

10. How long have you been in your present type of work?
    ____ YEARS

11. How many people do you supervise or have responsibility over?
    _____

12. In what program or department do you work?
    _____

13. What is your major job title?
    _____

14. How many hours per week do you work? (including work other than your job in this organization)
    ____ 70 or more
    ____ 60-69 hr/wk
    ____ 50-59 hr/wk
    ____ 40-49 hr/wk
    ____ 30-39 hr/wk
    ____ 20-29 hr/wk
    ____ less than 20

15. Of your total working time, indicate what percentage of that time you spend:
    ____% in direct contact with recipients
    ____% in direct contact with other staff
    ____% professional training
    ____% other (please specify)
    TOTAL = 100%

16. Approximately how many hours per week are you in direct contact with recipients?
    ____ HOURS

17. How severe is the impairment of your average recipient?
    ____ no impairment
    ____ mild impairment
    ____ moderate impairment
    ____ serious impairment
    ____ very serious impairment

18. On the average, how much improvement do you judge your recipients make?
    ____ no improvement
    ____ mild improvement
    ____ moderate improvement
    ____ great improvement

19. How much authority do you have in making decisions on your job?

_____ no authority
_____ much less authority than I need
_____ less authority than I need
_____ as much authority as I need

20. How much support do you receive from your supervisor about your job?

_____ no support
_____ little support
_____ moderate support
_____ as much support as I need

21. In the past six months, how much change has taken place in your organization?

_____ no change
_____ slight change
_____ moderate change
_____ much change

22. In the past six months, how much change has taken place in your job?

_____ no change
_____ slight change
_____ moderate change
_____ much change

23. In the past six months, how much change has taken place in your life outside your job?

_____ no change
_____ slight change
_____ moderate change
_____ much change

24. I see my personal expertise as a: (select one)

_____ clinician
_____ administrator
_____ supervisor
_____ paraprofessional
_____ secretary/receptionist
_____ other:_____

25. Is there a difference between the way you see yourself and what you actually do on your job?

_____ no difference
_____ slight difference
_____ moderate difference
_____ much difference

26. My income per year is: (include all work-related income)

_____ less than $5,000
_____ $5,000 - 9,999
_____ $10,000 - 14,999
_____ $15,000 - 19,999
_____ $20,000 - 24,999
_____ $25,000 or greater

This is a survey of your choices. There are no right or wrong answers. Answer each statement in a way that most accurately describes how you would feel, react, or behave in the situation or problem described.

Circle the number under the answer you have chosen.

		Never	Sometimes	Frequently	Always
1.	I enjoy doing difficult things	1	2	3	4
2.	I worry and fret.	1	2	3	4
3.	I am confused about my feelings.	1	2	3	4
4.	I look forward to starting something new.	1	2	3	4
5.	I enjoy learning new things.	1	2	3	4
6.	I feel guilty when I behave inappropriately	1	2	3	4
7.	I am frustrated when things don't go right.	1	2	3	4
8.	I have ways of handling my nervousness that are useful to me.	1	2	3	4
9.	I like new experiences.	1	2	3	4
10.	I am a "now" person.	1	2	3	4
11.	I learn from new experiences.	1	2	3	4
12.	I feel my life has purpose.	1	2	3	4
13.	In the future I want to do things differently than I have in the past.	1	2	3	4
14.	Worry makes me feel hopeless.	1	2	3	4
15.	I fret over problems which turn out to be trivial.	1	2	3	4
16.	I gossip a little.	1	2	3	4
17.	Feelings make me realize my humanness.	1	2	3	4
18.	I choose (make my own choices) as to how I will react to a situation.	1	2	3	4
19.	Being afraid incapacitates me.	1	2	3	4
20.	I feel that the best part of my life is over.	1	2	3	4
21.	I am responsible for my successes and failures.	1	2	3	4
22.	I am an active person.	1	2	3	4
23.	I feel I am responsible for my actions.	1	2	3	4
24.	I express my feelings.	1	2	3	4
25.	When I make mistakes I try to understand why.	1	2	3	4
26.	If I were to relive my life, I would do much differently than I have.	1	2	3	4

		Never	Sometimes	Frequently	Always
27.	If something is really important to me, I know I will succeed at it.	1	2	3	4
28.	I have a desire to learn new things.	1	2	3	4
29.	Things turn out for me the way I expect them to.	1	2	3	4
30.	I am accurate in describing my past reactions.	1	2	3	4
31.	I feel hopeless.	1	2	3	4
32.	My friends comment on my high degree of energy.	1	2	3	4
33.	When I start an important task, I feel I will succeed at it.	1	2	3	4
34.	I put off until tomorrow what I ought to do today.	1	2	3	4
35.	I feel my life has meaning.	1	2	3	4
36.	I can feel good about myself even when facing a difficult problem.	1	2	3	4
37.	I let other people make me feel guilty.	1	2	3	4
38.	It's hard for me to feel good about myself when I fail.	1	2	3	4
39.	I like following a set schedule.	1	2	3	4
40.	My enthusiasm is contagious.	1	2	3	4
41.	I am ashamed of my feelings.	1	2	3	4
42.	I am a happy person.	1	2	3	4
43.	I feel hopeful about my future.	1	2	3	4
44.	I am pleased with my reactions to situations.	1	2	3	4
45.	Past successes tend to fall into perspective.	1	2	3	4
46.	I want to be around when tomorrow comes.	1	2	3	4
47.	I look for positive elements in new situations.	1	2	3	4
48.	I anticipate how I will feel in a situation.	1	2	3	4
49.	I am a creative problem solver.	1	2	3	4
50.	I welcome the opportunity to take responsibility and do things on my own.	1	2	3	4
51.	My perceptions of a situation are accurate.	1	2	3	4
52.	I make my own major decisions.	1	2	3	4
53.	It is important that other people accept what I do.	1	2	3	4

		Never	Sometimes	Frequently	Always
54.	I feel ashamed when I behave inappropriately.	1	2	3	4
55.	I would rather win than lose in a game.	1	2	3	4
56.	Unusual ways of doing things turn me on.	1	2	3	4
57.	My imagination leads me to anticipate solutions to future problems.	1	2	3	4
58.	Getting too excited can stop me from doing something.	1	2	3	4
59.	I enjoy both sad and happy feelings.	1	2	3	4
60.	I have had exciting and interesting experiences.	1	2	3	4
61.	I change my way of thinking to please others.	1	2	3	4
62.	I have a good general idea how I will react in most situations.	1	2	3	4
63.	I like to fool around with new ideas, even if they turn out later to have been a total waste of time.	1	2	3	4
64.	Tuning into the emotional experiences of others helps me to grow.	1	2	3	4
65.	I enjoy working with a group.	1	2	3	4
66.	My reactions to situations are misunderstood.	1	2	3	4
67.	I like to work on a problem even when I know there is no clear-cut answer.	1	2	3	4
68.	I am a good problem solver.	1	2	3	4
69.	I feel the best part of my life is now.	1	2	3	4

This is a survey of your opinion about your job and your behavior. There are no right or wrong answers. Answer each statement in a way that most accurately describes your agreement or disagreement with the statement.

Circle the number under the answer you have chosen.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	I have clear, planned goals and objectives for my job.	1	2	3	4
2.	I know that I have divided my time properly.	1	2	3	4
3.	I know what my responsibilities are.	1	2	3	4
4.	I know exactly what is expected of me.	1	2	3	4
5.	I feel certain about how much authority I have on the job.	1	2	3	4
6.	Explanation is clear of what has to be done.	1	2	3	4
7.	I have to do things that should be done differently under different conditions.	1	2	3	4
8.	I receive an assignment without the manpower to complete it.	1	2	3	4
9.	I have to buck a rule or policy in order to carry out an assignment.	1	2	3	4
10.	I work with two or more groups who operate quite differently.	1	2	3	4
11.	I receive incompatible requests from two or more people.	1	2	3	4
12.	I do things that are apt to be accepted by one person and not by others.	1	2	3	4
13.	I receive an assignment without adequate resources and materials to execute it.	1	2	3	4
14.	I work on unnecessary things.	1	2	3	4
15.	I am given enough time to do what is expected of me on my job.	1	2	3	4
16.	It often seems like I have too much work for one person to do.	1	2	3	4
17.	The performance standards on my job are too high.	1	2	3	4

The following statements concern your feelings about yourself and your job. Answer each statement in a way that most accurately describes your agreement or disagreement with the statement.

Circle the number under the answer you have chosen.

		Strongly Disagree	Disagree	Agree	Strongly Agree
1.	On a few occasions, I have given up doing something because I thought too little of my ability.	1	2	3	4
2.	I have never intensely disliked anyone.	1	2	3	4
3.	I am often bothered by indigestion or heartburn.	1	2	3	4
4.	There have been occasions when I felt like smashing things.	1	2	3	4
5.	I do not have very good health.	1	2	3	4
6.	I am always willing to admit when I make a mistake.	1	2	3	4
7.	I would consider myself in fair health.	1	2	3	4
8.	I seem to tire quickly.	1	2	3	4
9.	My job tends to directly affect my health.	1	2	3	4
10.	I get irritated or annoyed over the way things are going.	1	2	3	4
11.	I have felt fidgety or nervous as a result of my job.	1	2	3	4
12.	On occasion I have had doubts about my ability to succeed in life.	1	2	3	4
13.	No matter who I'm talking to, I'm always a good listener.	1	2	3	4
14.	I have always faced up to the bad as well as the good consequences of the things I have done.	1	2	3	4
15.	There have been times when I felt like rebelling against people in authority, even though I knew they were right.	1	2	3	4
16.	There have been times when I was quite jealous of the good fortune of others.	1	2	3	4
17.	I am sometimes irritated by people who ask favors of me.	1	2	3	4
18.	I always try to practice what I preach.	1	2	3	4
19.	I have sometimes taken unfair advantage of another person.	1	2	3	4
20.	I work under a great deal of tension.	1	2	3	4
21.	I sometimes feel weak all over.	1	2	3	4
22.	I sometimes try to get even, rather than forgive and forget.	1	2	3	4

		Strongly Disagree	Disagree	Agree	Strongly Agree
23.	I sometimes feel resentful when I don't get my own way.	1	2	3	4
24.	I often wonder whether it is all worth it.	1	2	3	4
25.	I would never think of letting someone else be punished for my wrongdoing.	1	2	3	4
26.	I am always attentive to the person I am with.	1	2	3	4
27.	I have almost never felt the urge to tell someone off.	1	2	3	4
28.	I have felt nervous before attending meetings in the company.	1	2	3	4
29.	Problems associated with my job have kept me awake at night.	1	2	3	4
30.	At times I have wished that something bad would happen to someone I disliked.	1	2	3	4
31.	I have never deliberately said something that hurt someone's feelings.	1	2	3	4
32.	I am quick to admit making a mistake.	1	2	3	4
33.	There have been occasions when I took advantage of someone.	1	2	3	4
34.	I wake up with stiffness or aching in joints or muscles.	1	2	3	4
35.	If I had a different job, my health would improve.	1	2	3	4
36.	I would consider myself in good or excellent health.	1	2	3	4
37.	I may now have an ulcer, but I am not sure of it.	1	2	3	4
38.	I have had trouble getting to sleep or staying asleep.	1	2	3	4
39.	I am always courteous, even to people who are disagreeable.	1	2	3	4
40.	I often "take my job home with me" in the sense that I think about it when doing other things.	1	2	3	4

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

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

	1	4	7
HOW STRONG:	Very mild	Moderate	Very strong

1. I feel emotionally drained from my work.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

2. I feel used up at the end of the workday.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

3. I feel similar to my recipients in many ways.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

4. I feel personally involved with my recipients' problem.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

5. I feel fatigued when I get up in the morning and have to face another day on the job.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

6. I feel uncomfortable about the way I have treated some recipients.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

7. I can easily understand how my recipients feel about things.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

8. I feel I treat some recipients as if they were impersonal "objects."
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

9. Working with people all day is really a strain for me.
   NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
   HOW STRONG: 1 2 3 4 5 6 7

10. I deal very effectively with the problems of my recipients.
    NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
    HOW STRONG: 1 2 3 4 5 6 7

11. I feel burned out from my work.
    NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
    HOW STRONG: 1 2 3 4 5 6 7

12. I feel I'm positively influencing other people's lives through my work.
    NEVER ☐ HOW OFTEN: 1 2 3 4 5 6
    HOW STRONG: 1 2 3 4 5 6 7

	1	2	3	4	5	6
HOW OFTEN:	A few times a year	Monthly	A few times a month	Weekly	A few times a week	Daily
HOW STRONG:	1 Very mild		4 Moderate		7 Very strong	

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

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

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

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

15. I feel very energetic.

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

16. I feel frustrated by my job.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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